GALVESTON, TX, DISTRICT

Galveston District comprises drainage basins of all short streams arising in coastal plain of Texas and flowing into the Gulf of Mexico, including the entire basin of Buffalo Bayou, San Jacinto, San Bernard, Lavaca, Navidad, Mission, and Aransas Rivers. It embraces Agua Dulce, San Fernando, and Olmos Creek Basins draining into Baffin Bay, and coastal area south thereof to the Rio Grande and east of western Boundary of Starr County, Texas. It includes lower basins of major streams flowing into the Gulf of Mexico: Sabine River, Texas and Louisiana, downstream from U.S. Highway 190 crossing at Bon Wier, Texas; Neches River downstream from Town Bluff gaging station; Trinity River downstream from Texas State Highway 19 crossing at Riverside, Texas; Brazos River downstream from confluence with Navasota River; Colorado River downstream from northern boundary of Fayette County; Guadalupe River downstream from confluence with San Marcos River; San Antonio River downstream from confluence with Escondido Creek; Nueces River downstream from confluence with Frio and Atascosa River.

IMPROVEMENTS

Navigation

1. AQUATIC PLANT CONTROL, TX (SOUTHWESTERN DIVISION) 1965 ACT

Location. Navigable waters, tributary streams, connecting channels, and other allied waters in Texas.

Previous project. For details see page 699 of Annual Report for 1963.

Existing project. A comprehensive project to provide for control and progressive eradication of water-hyacinth, alligatorweed, Eurasian watermilfoil, hydrilla, and other obnoxious aquatic plant growths, from navigable waters, tributary streams, connecting channels, and other allied waters in Texas in the combined interest of navigation, flood control, drainage, agriculture, fish and wildlife conservation, public health, and related purposes, including continued research for development of the most effective and economic control measures. Control of water-hyacinth and alligatorweed has been approved for the Nueces River Basin, North Coastal Area, Guadalupe River Basin, Sabine River Basin, Trinity River Basin, Cypress Creek Basin, Neches River Basin, South Coastal Area, San Jacinto River Basin, Rio Grande Basin, Colorado River Basin and Brazos River Basin. Control of hydrilla and watermilfoil is on a site by site basis after analysis and issuance of National Environmental Policy Act documentation

Local cooperation. Sec. 302, 1965 River and Harbor Act, amended by Water Resources Development Act of 1986, applies.

Operations during fiscal year. The cost-sharing program had been funded for $31,000 for FY 98, but chemical control work by the State of Texas was curtailed through FY00 to await interpretation of herbicide labelling instructions by the Environmental Protection Agency. Chemical control work has been reinstated by the state for FY01. Only mechanical control of waterhyacinth and hydrilla is accomplished by the State along segments of the Rio Grande. A new one-year cost-sharing, cost-reimbursable contract, with the options for an additional four years, has been negotiated with the State of Texas to maintain Program capabilities in the event of future funding.

Cost incurred for Fiscal Year 2000 was $9,810.

2. BRAZOS ISLAND HARBOR, TX

Location. At extreme south end of coast of Texas, about 7 miles north of mouth of Rio Grande and about 5 miles east of Brownsville, Texas. (See National Ocean Survey Chart 11301.)

Previous project. For details see page 1017 of Annual Report for 1932.

Existing project. Provides for channel dimensions in various sections of the waterway as shown in Table 40-H.

Project also provides for dual jetties at the gulf entrance, a north jetty 6,330 feet long, a south jetty 5,092 feet long, and 1,000-foot extension to existing north jetty and for maintenance of 3rd fishing harbor constructed by local interests. Under ordinary conditions, mean tidal range is about 1.5 feet, and extreme range is about 2 feet. All depths refer to mean low tide. To some extent, height of tides is dependent on the wind, and during strong “northers” in winter season, water surface in southern end of Laguna Madre may be raised 4 feet or more above mean low tide in the gulf.

Widening Brownsville Channel from Goose Island to Brownsville turning basin and deepening southeast corner of Brownsville turning basin to 36 feet was completed in April 1980. The 1,000-foot extension to existing north jetty was deauthorized under Section 1001 of the Water Resources Development Act of 1986. The entrance channel was enlarged from 38 feet by 300 feet to 44 feet by 300 feet in FY 1992. Construction of an environmental mitigation site consisting of the creation of a 16 acre tidal wetland which included shoal grass and black mangroves, was completed in 1997. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. Fully complied with.

Terminal facilities. Numerous terminal facilities for bulk and liquid cargo are available. (See Port Series No. 26, revised 1991.) Facilities are adequate for existing commerce.

Operations during fiscal year. Maintenance: Routine maintenance. (See Table 40-J for dredging operations.)

3. CEDAR BAYOU, TX.

Location. The bayou is about 30 miles long. It flows to the south and empties into northwest corner of upper Galveston Bay, about 1.5 miles below mouth of San Jacinto River and about 28.5 miles north of Galveston, Texas. (See National Ocean Survey Chart 11326.)

Previous project. For details see Annual Report for 1938.

Existing project. Project provides for a channel 10 feet by 100 feet from Houston Ship Channel to Bayou Mile 11.0. Channel was completed from Houston Ship Channel to first bend in Cedar Bayou above the mouth in 1931. Channel from Mile -0.1 to Mile 3.0 was completed in March 1975. Channel from 3.0 to Mile

11.0 was deauthorized under Sec. 12 of Public Law 93-251 and re-authorized in December 2000 under Sec. 349 (a)(2) of Public Law 106-541, the Water Resources Development Act of 2000. Project also includes jetties at mouth of bayou provided for under previous project.

Under ordinary conditions, mean tidal range is about 0.6 feet and extreme range 1.2 feet. Height of tides is dependent largely on the wind, and during strong "northers" in the winter season water surface may be depressed 2 feet below mean low tide. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. Fully complied with.

Terminal facilities. U.S. Steel Company has a barge dock at bayou mile 2.8, and there are a few small wharves, privately owned, for local use at various places along Cedar Bayou. Facilities are considered adequate for existing commerce.

Operations during fiscal year. Maintenance: Routine maintenance. (See Table 40-J for dredging operations.)

4. CHANNEL TO PORT BOLIVAR, TX

Location. Port Bolivar is at end of Bolivar Peninsula and 4 miles north of city of Galveston. Channel connects the port with channel in Galveston Harbor. (See National Ocean Survey Chart 11324.)

Previous project. For details see page 1856 of Appendix to Annual Report for 1915.

Existing project. Existing project dimensions for channel are shown in Table 40-H. (Also see Table 40-B for authorizing legislation.)

Under ordinary conditions, mean tidal range is about 1.3 feet and extreme range 2 feet. Height of tides is dependent largely on the wind, and during strong "northers" in the winter season water surface may be depressed 2 feet below mean low tide. Enlargement of turning basin from 1,000 to 1,600 feet is inactive. A channel 14 feet deep, 200 feet wide, and approximately 950 feet long is maintained across the east end of the turning basin to accommodate the Galveston-Port Bolivar ferry. Project is complete except for inactive portion. Project dimensions have not been maintained in the completed part since lesser dimensions are adequate for existing commerce. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. None required.

Terminal facilities. Terminals are privately owned and consist of 2 slips and 2 piers. The piers, 400 feet wide by 1,200 feet long and 210 feet wide by 1,200 feet long, are badly deteriorated and not in use. The slips are used as anchorage by shallow-draft vessels. A highway ferry landing owned by the State of Texas is located at south end of turning basin. Facilities are considered adequate for existing commerce.

Operations during fiscal year. Maintenance: Routine maintenance. (See Table 40-J for dredging operations.)

5. CLEAR CREEK AND CLEAR LAKE, TX

Location. Clear Creek has its source about 18 miles south of Houston, Texas, and flows southeast for about 25 miles, emptying into west side of upper Galveston Bay at a point 24 miles north west of Galveston, Texas. (See National Ocean Survey Chart 11326.)

Existing project. Project provides for 1.5 miles of channel 7 feet by 75 feet from Galveston Bay to mouth of Clear Creek; 0.7 miles of channel 7 feet by 60 feet, known as North Fork Channel; and 7.7 miles of channel 7 feet by 60 feet through Clear Creek and Clear Lake. The project was completed in June 1950.

Under ordinary conditions, mean tidal range is about 0.8 foot and extreme range 1.4 feet. Height of tides is dependent largely on the wind, and during strong "northers" in the winter season water surface may be depressed 2 feet below mean low tide.

Local cooperation. Fully complied with.

Terminal facilities. Consist of small privately owned wharves, several ship repair yards and marinas which accommodate light commercial vessels and pleasure yachts. These are along lake shore and at towns of Seabrook and Kemah at mouth of creek. A commercial shell loading dock is located near League City at the head of NASA-Manned Spacecraft Center has a barge dock along lake shore near their property.

Operations during fiscal year. Maintenance: No maintenance required for fiscal year.

6. CORPUS CHRISTI SHIP CHANNEL, TX

Location. This project, formerly known as Port Aransas-Corpus Christi Waterway, Texas, was changed to Corpus Christi Ship Channel, Texas, by 1968 River and Harbor Act. This is a consolidation of old improvements of Port Aransas, Texas, and channel from Aransas Pass to Corpus Christi, Texas. Aransas Pass is on southern portion of Texas Coast, 180 miles southwest of Galveston and 132 miles north of mouth of Rio Grande. Aransas Pass connects Corpus Christi Bay with the gulf. Waterway extends from deep water in the gulf through Aransas Pass jettied entrance, thence westerly 20.75 miles to and including a turning basin at Corpus Christi, thence westerly 1.75 miles through Industrial Canal to and including turning basin at Avery

Point, thence westerly 4.25 miles to and including a turning basin near Tule Lake, thence northwesterly 1.8 miles to and including a turning basin at Viola, Texas. (See National Ocean Survey Charts 11308, 11309, 11311, and 11314.)

Previous project. For details see page 1861 of Annual Report for 1915.

Existing project. (See Table 40-H for existing project dimensions provided for in various channels and basins comprising this waterway.)

Project also provides for two rubblestone jetties at Aransas Pass entrance, extending into the gulf from St. Joseph and Mustang Islands, project lengths of which are 11,190 and 8,610 feet, respectively. Project further provides for a stone dike on St. Joseph Island about 20,991 feet long, connecting with north jetty and extending up this island to prevent a channel being cut around jetty. Project also provides for a breakwater at the entrance to the harbor area at Port Aransas, and for the realignment of the existing 12-foot by 100-foot project channel to Port Aransas. The breakwater consists of two overlapping sections. The one on the east side of the realigned entrance channel has a length of 830 feet and the second, located on the west side of the entrance channel, has a length of 1,290 feet. The channel to Port Aransas was relocated in the 300-foot clear distance between the overlapping sections. The portion of the channel remaining inside the breakwaters was widened to 150 feet. Under ordinary conditions, mean tidal range at Aransas Pass is about 1.1 feet and extreme range about 2 feet, and at Corpus Christi mean range about 1 foot and extreme about 1.5 feet. Heights of tides are dependent largely on strength and directions of winds, and during strong "northers" in the winter season water surface may be depressed as much as 3 feet below mean low tide. Estimated cost for new work is: Federal (Corps) $74,938,515, including $456,515 for Port Aransas Breakwaters and exclusive of amount expended on previous projects: and non-Federal $18,977,431 (includes $768 for Port Aransas Breakwaters) including $7,644,435 contributed funds and value of useful work performed, $3,320,228 lands, $6,027,000 relocations and $1,985,000 other cost. (October 1, 1992 base price.)

The Port Aransas-Corpus Christi 40-foot project was completed in 1966. The Jewel Fulton Canal was completed in 1963. The Port Aransas Breakwaters were completed in July 1973. Deepening deep-draft channels to 45 feet from Tule Lake Turning Basin through Viola Turning Basin was completed in 1989, and constructing a mooring area at Port Ingleside with dolphins has been deferred. Entrance and jetty channels have been dredged to project depth and width, and dredging of channel from Harbor Island to and through the Chemical Turning Basin at 45-foot depth has been completed. Initial mooring dolphins were completed in May 1979. Disposal area levees, Area 1 and Rincon were completed in August 1984. First stage disposal area levees, South Shore, were completed in September 1984. Construction contract for mitigation terracing was completed in 1997. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. Fully complied with.

Terminal facilities. Terminal facilities on Harbor Island at head of Aransas Pass, Ingleside, Corpus Christi, La Quinta, Avery Point, and Viola, are considered adequate for existing commerce. (See Port Series, No. 25, revised 1993, Corps of Engineers.)

Operations during fiscal year. Maintenance: Routine maintenance. (See Table 40-J for dredging operations.)

7. DOUBLE BAYOU, TX

Location. Enters Trinity Bay on the east side about 30 miles north of Galveston and about 8.25 miles south of Anahuac, Texas.

Existing Project. Project provides for a channel 7 feet by 125 feet from the mouth of Double Bayou to the 7-foot contour in Trinity Bay, a length of 3.9 miles; and a channel, know as West Fork, 7 feet by 100 feet for a length of 2.0 miles. The project was completed in 1971.

Under ordinary conditions mean tidal range is about 0.5 feet and extreme range is about 1.2 feet. Height of tides is dependent largely on winds, and during strong north winds in the winter season, water surfaces may be depressed 1.5 feet below mean low tide. (See National Ocean Survey Chart 11326.)

Local cooperation. Fully Complied with.

Terminal facilities. Facilities are privately owned. At the mouth of the bayou is a timber wharf for loading oil barges. Between miles 1 and 1.5 above the mouth is a timber wharf, a boat slip, and a marine railway owned by the Brown and Root Corporation. At mile 3 above the mouth is a small depot for handling oyster shell. The facility consists of a timber bulkhead and hoppers for loading trucks. One-half mile above the mouth are several fishing vessel docks.

Operations during fiscal year. Maintenance: No maintenance required for Fiscal Year 2000.

8. FREEPORT HARBOR, TX

Location. Formed by improvement of Brazos River, Texas, from mouth to about 6 miles upstream to Freeport, Texas. (See National Ocean Survey Charts 11321 and 11322.)

Previous projects. For details see page 1860 of Annual Report for 1915, and page 872 of Annual Report for 1938.

Existing project. Existing project dimensions for various channels and basins are shown in Table 40-H on channel dimensions at end of chapter.

Existing project also provides for dual jetties and a diversion canal for the Brazos River, including a dam, a lock in the dam and necessary auxiliary equipment. Also provides for rehabilitation of southwest jetty and the relocation of the northeast jetty (about 640 feet to the northeast); realignment of the channel between the Jetty Channel and Brazosport Turning Basin; realignment of the channel between Brazosport Turning Basin and Upper Turning Basin; relocation of Upper Turning Basin; and public use facilities adjacent to the Freeport Jetties. The 30-foot channel from Upper Turning Basin to Stauffer Chemical Plant, including the turning basin, was deauthorized by Sec. 12 of PL 93-251. Construction of lock in diversion dam at local expense is considered inactive.

The 38-36 foot project was completed in 1962. The 45-foot channel was completed in 1993 as follows: Relocation of the U. S. Coast Guard station was completed in May 1990; dredging the channel and turning basin to 36-feet and the Upper Turning Basin to 46-feet was completed in July 1990; dredging the jetty channel and the Lower Turning Basin was completed in November 1990; Construction of 3,700 feet of the North Jetty, was completed in March 1991; dredging the entrance channel was completed in April 1992; dredging the Main channel, Brazosport turning basin and jetty channel was completed in June 1992; construction of public use facilities and grading and stone protection was completed in August 1992; and rehabilitation of the south jetty and addition of 500-feet to the north jetty was completed in May 1993.

Navigation problems were identified by the Local Sponsor and pilots, and a contract to make channel adjustments to a bend near the project main turning basin was completed in 1998 to provide full utilization of the 45-foot channel. Project is essentially complete. Construction of final recreation area at Quintana by the Local Sponsor is the last remaining item. (See Table 40-G for total cost of existing project to September 30, 2000.)

Under ordinary conditions mean tidal range is about 1.5 feet and extreme range is about 2.5 feet. Except under extreme conditions, rises on river and in diversion channel do not cause greater variations in water surface than those caused by tidal action. Estimated cost of new work is: $63,707,000 Federal (Corps) and $470,000 Federal (USCG); and $32,313,000 non-Federal, including $21,302,000 contributed funds, $300,000 contributed work, $6,967,000 lands, $3,174,000 levees and spillways, and $570,000 relocations. (October 1, 1997 base price.)

Local cooperation. Fully complied with except for Section 101 of River and Harbor Act of 1970, under cost-sharing tenets of the Water Resources Development Act of 1986 and the Water Resources Development Act of 1996. Local Cooperation Agreement, executed June 26, 1986, along with Amendments 1, 2, 3, and 4 executed March 19, 1987; July 19, 1991; July 19, 1991; and July 15, 1997; respectively, require that local interest provide lands, easements, rights-of-way, including land for recreation, and dredged material disposal areas, presently estimated at $10,141,000, modify or relocate utilities, roads, and other facilities, except railroad bridges, where necessary for construction of the project, presently estimated at $570,000, contribute in cash one-half of the separable and joint costs allocated to recreation, presently estimated at $530,000; and, during construction, pay 25 percent of the construction costs allocated to deep-draft navigation, including disposal facility construction, presently estimated at $21,302,000.

Terminal facilities. Small privately owned wharves, two oil docks, one acid dock, two shell unloading docks and one caustic dock. Brazos River Navigation District has one large dock with four transit sheds over rail facilities permitting all-weather work. Facilities considered adequate for existing commerce. (See Port Series No. 26, revised 1991, for additional facilities.)

Operations during fiscal year. New Work: No new work for FY 00.

Maintenance: Routine maintenance. (See Table 40-J for dredging operations.)

9. GALVESTON HARBOR AND CHANNEL, TX

Location. A consolidation of authorized improvements at Galveston, Texas, which includes projects formerly identified as Galveston Harbor, Texas; Galveston Channel, Texas; and Galveston seawall extension. Entrance to Galveston Harbor is on Gulf of Mexico on the northern portion of the Texas Coast. Galveston Channel extends from a point in Galveston Harbor between Bolivar Peninsula and Fort Point to and along wharf front Galveston, Texas, and is about 5 miles long and 1,200 feet wide. (See National Ocean Survey Chart 11324/5.)

Previous projects. For details see page 1854 of Annual Report for 1915.

Existing project. Provides for channel dimensions in sections of the waterway shown in Table 40-H.

Also provided are: two rubble-mound jetties, the south one extending from Galveston Island and the north one extending from Bolivar Peninsula, for distances of 35,900 feet and 25,907 feet, respectively,

into the Gulf of Mexico; a concrete seawall from the angle at Sixth Street and Broadway, in the city of Galveston, to the south jetty, and a 16,300-foot extension of the concrete seawall in a southwesterly direction from 61st Street; for 11 groins along the gulf shore between 12th Street and 61st Street; and for maintenance of seawall from the angle at 6th Street and Broadway to the south jetty. Under ordinary conditions, mean tidal range in Galveston Harbor is 1.6 feet on outer bar and 1.4 feet on inner bar with extreme ranges of 2.3 and 2.1 feet, respectively. Mean range in Galveston channel is about 1.3 feet and extreme range about 2 feet under ordinary conditions. Height of tides in both Galveston harbor and channel is dependent largely on the wind, and during strong "northers" water surface may be depressed 2 feet below mean low tide.

Existing project is complete. Dredging of Galveston channel to 36-foot depth was completed in November 1966. Dredging of the realigned entrance and Outer Bar Channel was completed in October 1967. Rehabilitation of the Beach Front Groins was completed June 1970. Dredging of Galveston channel to 40 feet was completed in March 1976. See Section 16. TEXAS CITY CHANNEL, TX regarding work authorized by Water Resources Development Act of 1986, Section 11, HOUSTON-GALVESTON NAVIGATION CHANNELS, TX, for work authorized by the Water Resources Development Act of 1996. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. Complied with.

Terminal facilities. None on Galveston Harbor, which is entrance channel leading to terminal facilities on Galveston, Texas City, and Houston Ship Channels. Galveston Channel terminal facilities are mostly on south side of channel. Principal wharves, owned by the city of Galveston, extend from 10th to 41st Street (see Port Series No. 23, revised 1996). A container ship terminal equipped with a crane capable of stacking containers three units high on the deck of any normal container ship has been completed and placed into operation by the city of Galveston at Piers 10 and 11, on the south side of Galveston Channel. The city of Galveston has also placed into operation a barge terminal equipped with two 35-ton and one 5-ton cranes for loading and unloading barges on Lash and Seabee ships at Pier 35 and a docking and holding area for Lash and Seabee barges on Pelican Island, directly across the channel from Piers 35 and 36. Present facilities are considered adequate for existing commerce.

Operations during fiscal year. New Work: See Section 11, HOUSTON-GALVESTON NAVIGATION CHANNELS, TX.

Maintenance: Routine Maintenance. Also see Section 11, HOUSTON-GALVESTON NAVIGATION CHANNELS, TX. (See Table 40-J for dredging operations.)

10. GULF INTRACOASTAL WATERWAY BETWEEN APALACHEE BAY, FL, AND THE MEXICAN BORDER

Location. Extends from a point on Sabine River about 3 miles below Orange, Texas, to Brownsville, Texas, about 421 miles; a navigation channel, about 7 miles long, in Colorado River, extending from Matagorda, Texas, to Gulf of Mexico; a tributary channel in San Bernard River, extending from Intracoastal Waterway crossing to State highway bridge some 30 miles above crossing; a tributary channel in Colorado River extending from Intracoastal Waterway upstream 15.5 miles; a tributary channel extending about 14 miles from Intracoastal Waterway to Palacios, Texas; a tributary channel extending about 2 miles from Intracoastal Waterway to Rockport, Texas; a tributary channel extending about 6 miles from Intracoastal Waterway near Port Aransas, Texas, to town of Aransas Pass, Texas; a tributary channel about one-fourth mile long extending from Intracoastal Waterway near Port O'Connor, Texas, into Barroom Bay; a tributary channel extending about 38.8 miles from Intracoastal Waterway via Seadrift to a point in Guadalupe River 5.5 miles below Victoria, Texas; a harbor of refuge for small craft at Seadrift; a channel extending from gulf to Port Mansfield, Texas, about 11 miles; and a tributary channel in Arroyo, Colorado extending from Intracoastal Waterway to a point near Harlingen, Texas, about 31 miles; side channels in vicinity of Port Isabel, Texas, and a small boat basin at Port Isabel, Texas, and a tributary channel extending from Intracoastal Waterway main channel at a point in West Galveston Bay into Offatts Bayou about 2.2 miles with a west turnout (wye connection) 12 feet deep and 125 feet wide between Offatts Bayou Channel and the Gulf Intracoastal Waterway. (See National Ocean Survey Charts 11302, 11303, 11305, 11306, 11308, 11309, 11314, 11315, 11317, 11319, 11322, 11326, and 11331.)

Previous project. For details see page 1859 of Annual Report for 1915. (West Galveston Bay and Brazos River Canal, Texas.)

Existing project. Existing project dimensions provided for in main channel of waterway: A channel 12 feet deep (below mean low tide) and 125 feet wide from the Sabine River to Brownsville, Texas. Relocation of channel 12 feet deep by 125 feet wide in Matagorda Bay, miles 454.3 to 471.3, relocation of channel 12 feet deep by 125 feet wide in Corpus Christi Bay, miles 539.4 to 549.7 (mileage is west of Harvey

Lock, Louisiana); and alternate channel, 12 feet deep (below mean low tide) and 125 feet wide via Galveston Channel and Galveston Bay to the Galveston causeway; maintenance of existing channel 12 feet deep by 125 feet wide through Lydia Ann Channel, between Aransas Bay and Aransas Pass; provisions of such passing places, widening of bends, locks and guard locks, railway bridges over artificial cuts as are necessary, and the tributary channels shown in tabulation. The authorized channel 16 feet deep and 125 feet wide from Sabine River to Houston Ship Channel is inactive. (See Table 40-I on existing project dimensions provided for in tributary channels.)

Removal of the railroad bridge across the canal at Mud Bayou was completed and operation and care of the facility was discontinued on April 14, 1969. Deepening the existing 6 foot by 60 foot side channels at Port Isabel to 12 feet was completed February 22, 1972, Offatts Bayou channel was completed January 1974. Relocation of main channel across Corpus Christi Bay was completed in September 1976. The 14 foot by 175 foot Channel to Aransas Pass was completed in April 1979. Dredging Chocolate Bayou Channel was completed in January 1981. Construction of a saltwater barrier in Chocolate Bayou was completed in February 1981. The 12 foot by 125 foot channel relocation route in Matagorda Bay has been deauthorized. The Harbor of Refuge at Seadrift, Texas, has been placed in the inactive category.

Mouth of Colorado River: Construction of jetties at mouth of Colorado River was completed in 1986. Construction of a navigation channel from the Gulf to the GIWW and an impoundment basin were fiscally completed in 1991. Construction of Tiger Island Dam and recreation facilities were also completed in 1991. Construction of the recreation facilities at Jetty Park was completed in 1992. Construction of the diversion dam and connecting channel was completed in 1993. Construction of the oyster cultch was completed in 1995.

Brazos River Floodgates- Major Rehabilitation: Major rehabilitation of the East Floodgate Guidewalls was completed in 1997. The cost of rehabilitation was $2,750,000 Federal (Corps) and $2,750,000 Federal (Inland Waterways Trust Fund).

Sargent Beach: Work authorized by the Water Resources Development Act of 1992 for construction of a concrete-pile and concrete block revetment structure which extends 8 - miles to protect the Gulf Intracoastal Waterway was completed in 1998. Construction cost was $29,460,000 Federal (Corps) and $29,460,000 Federal (Inland Waterways Trust Fund).

Active authorized work remaining consists of the following: (1) Work authorized by the Water Resources Development Act of 1988 for enlarging the existing Channel to Victoria from a depth of 9 feet and width of 100 feet to a depth of 12 feet and width of 125 feet. (2) Aransas National Wildlife Refuge, work authorized by the Water Resources Development Act of 1996 for construction of bank protection and a spill containment system through the critical habitat for the endangered whooping crane. (See Table 40-G for total cost of existing project to September 30, 2000.)

Mean tidal variation is 0.5 foot at Orange, 1 foot at Port Arthur, 1.3 feet in Galveston Bay, 1.5 feet at Freeport, 1 foot in Matagorda Bay, 1 foot in San Antonio Bay, 1 foot at Corpus Christi, 1.5 feet at Port Isabel, and 1.5 feet at Brownsville. Extreme ranges of tide under ordinary conditions are 1 foot at Orange, 1.5 feet at Port Arthur, 2 feet in Galveston Bay, 2 feet at Freeport, 1.5 feet in Matagorda and San Antonio Bays, 1.5 feet at Corpus Christi, 2 feet at Port Isabel, and 1.5 feet at Brownsville. Height of tides is dependent largely on wind. Strong north winds have depressed water surface as much as 2 feet below mean low tide.

Estimated cost for new work is:

Channel to Victoria - $28,391,000 Federal (Corps), $422,000 Federal (Department of Transportation), $62,000 Federal (U.S. Coast Guard), and $6,645,000 non-Federal consisting of $3,155,000 cash, $1,646,000 lands, $190,000 fender system, and $1,654,000 levees and other associated costs. (October 1, 2000 base prices.)

Aransas National Wildlife Refuge - $15,430,000 Federal (Corps). (October 1, 2000 base prices.)

Local cooperation. Fully complied with except for provisions of Section 101, 1968 River and Harbor Act and Water Resources Development Act of 1988. The Project Cooperation Agreement for Channel to Victoria was executed November 17, 1994.

Terminal facilities. There are terminal facilities at Aransas Pass, Port Arthur, Galveston, Port Isabel, and Brownsville. See Port Series No. 22 (revised 1988), Port Series No. 23 (revised 1996), Port Series No. 25 (revised 1983) and Port Series No. 26 (revised 1991), Corps of Engineers. Local interests constructed terminal facilities at Port Mansfield and Port Harlingen. There are numerous privately owned piers and wharves along the waterway. A 330-foot navigation district owned general cargo dock, a 770-foot private dock and a 760-foot private timber trestle have recently been completed at the upper end of the Channel to Victoria. Facilities are adequate for existing commerce.

Operations during fiscal year.

New Work: -

Channel to Victoria - The construction contract for dredging Stations 835+00 to 1300+00, awarded May 28, 1999, was completed in August 2000 at a cost of $3,858,122 (Federal) and $428,680 (contributed funds).

A construction contract for dredging Stations 1300+00 to 1841+21.69 was awarded September 29, 2000. No cost was incurred for FY 00.

Aransas National Wildlife Refuge - The contract for erosion protection at Welder Flats, awarded March 1999 and physically completed in September 1999 was financially completed in FY 00 with a final cost of $11,090. The final erosion protection and channel improvement contract was awarded March 20, 2000 and was 97 percent complete at year-end with a cost of $4,153,185. Cost incurred for a Dredged Material Management Plan was $282,390 for FY 99 and $69,266 for FY 00.

Maintenance: -

Main Channel and Tributaries - Repairs to mooring dolphins along the GIWW at a cost of $491,665 were made in FY 00. The cost incurred for 2000 for Dredged Material Management Plans was $216,213 for Corpus Christi to Port Isabel. (See Table 40-J for dredging operations.)

Aransas National Wildlife Refuge - No maintenance cost was incurred for FY 00.

Brazos River Floodgates - The Brazos River Floodgates were operated and maintained at a cost of $1,082,296. A construction contract to rehabilitate the east and west floodgates was awarded May 17, 2000 and continued through Fiscal Year 2000 at a cost of $400,000.

Channel to Victoria - A mowing contract was awarded in February 2000 at a cost of $28,300.

A series of archeological services contracts were issued during FY 00 for continued cultural resources work at Channel to Victoria Barge Canal sites 41CL59, 41CL76, and 41VT98. Continued artifact analysis and processing (FY 00 total of $280,854) was conducted for site 41CL59, which was initially excavated under full data recovery mitigation in FY 97. Site 41CL59 is an extensive prehistoric shell and earth midden with an occupation range dating from 400 B.C. to A.D. 1000. Archeological site 41CL76 is located just upstream from 41CL59. The site was tested for National Register of Historic Places eligibility during FY 99 for a total cost of $61,233. Post-testing work, including preparation, review, and approval of the final report of investigations, indicates that 41CL76 is eligible for National Register- and will require data recovery excavations prior to it's eventual demise due to ongoing bankline erosion along the Barge Canal. Initial data recovery excavations were launched during the last quarter of FY 00 for site 41VT98. The site has been identified as Archaic Period (ca. 2,500-3,500 B.C.) cemetery and occupation site. Data recovery (field work) excavations were issued under a separate delivery order for a total of $526,808. Excavations are planned to continue through FY 01, followed by post- fieldwork artifact analysis and report preparation that will be conducted throughout FY 01 and upcoming fiscal years 02-03.

Colorado River Locks - The Colorado River Locks were operated and maintained at a cost of $1,038,173.

Channel to Port Mansfield - Routine Maintenance. (See Table 40-J for dredging operations.)

Chocolate Bayou -Cost incurred for a Dredged Material Management Plan was $34,354. Routine maintenance. (See Table 40-J for dredging operations.)

Mouth of Colorado River - A contract to rehabilitate the jetty walkway was awarded August 22, 2000 and incurred a cost of $50,000 for FY 00. (See Table 40-J for dredging operations.)

11. HOUSTON-GALVESTON NAVIGATION CHANNELS, TX

Location. Houston Ship Channel connects Galveston Harbor, at a point opposite Port Bolivar, with city of Houston, Texas, extending 50 miles northwesterly across Galveston Bay through San Jacinto River and Buffalo Bayou to a turning basin at head of Long Reach with light-draft channel 5 miles long from turning basin to Jensen Drive, Houston. The entrance to Galveston Harbor and Channel is on Gulf of Mexico on the northern portion of the Texas Coast. Galveston Channel extends from a point in Galveston Harbor between Bolivar Peninsula and Fort Point to and along wharf from Galveston, Texas and is about 5 miles long and 1,200 feet wide. (See National Ocean Survey Charts 11324/5, 11327, 11328, and 11329.)

Existing project. See Section 9, GALVESTON HARBOR AND CHANNEL, TX and Section 12, HOUSTON SHIP CHANNEL, TX for project prior to October 1998. New authorized project provides for enlarging the Houston Ship Channel to a depth of 45 feet over a width which varies between 650 and 1,112 feet, and deepening the Galveston Harbor Channel to 47 feet (45-feet authorized and 2 feet for dredging inaccuracies and wind impact) over its original 800-foot width and 10.5 mile length; and extending the channel an additional 3.9 miles to the 47-foot bottom contour in the Gulf of Mexico along existing alignment. A dredged-material disposal plan, which would utilize confined or beneficial uses of dredged material in the bay and/or offshore disposal and 118 acres of Oyster mitigation is also provided in the project. Estimated cost for new work is: $379,177,000 Federal (Corps) which includes $86,726,000 for deferred environmental construction; $3,720,000 Federal (U.S. Coast Guard); and $129,803,000 non-Federal consisting of $66,273,000 cash, $994,000 lands, and $54,000 relocations for general navigation features; $8,977,000

for berthing areas; and $53,505,000 cash for environmental restoration which includes $28,909,000 for deferred environmental construction. (October 1, 2000 base price.)

The dredging plan for construction consists of nine reaches as follows: Offshore Entrance Channel Extension, Offshore Jetty and Entrance Channel, Lower Bay, Mid-Bay, Upper Bay, Lower Bayou, Goat Island, Upper Bayou and the Galveston Channel. Other construction includes Oyster Reef Mitigation and creation of marsh sites at Lower Bay, Mid Bay and Upper Bay disposal areas.

The first construction contract to dredge the Entrance Channel Extension, awarded August 7, 1998, was completed in 1999. The contract for dredging the entrance channel and jetty area was completed in March 2000. The Oyster Reef Mitigation contract was completed in July 2000. Construction continued through FY 00 on the Lower Bay and the Upper Bayou contracts. Construction was initiated on Upper Bay and Lower Bayou in FY 00.

Local cooperation. Complied with for the completed work. For the Houston-Galveston Navigation Channels project, authorized by the Water Resources Development Act of 1996, the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, apply. Local interests are required to provide lands, easements, rights-of-way, roads and other facilities, except railroad bridges; pay one-half of the separable and joint costs allocated to recreation; and pay 25 percent of the costs allocated to deep-draft navigation, during construction including in-kind work in connection with construction; and pay an additional 10 percent of the costs allocated to navigation within a period of 30 years following completion if not offset by credit allowed for lands, easements, rights-of-way, and relocations.

The Port of Houston Authority and the City of Galveston are the sponsors for the project. A Project Cooperation Agreement with the Port of Houston Authority was executed on June 10, 1998. The Project Cooperation Agreement with the City of Galveston is pending.

Terminal facilities. See Section 9, GALVESTON HARBOR AND CHANNEL, TX and Section 12, HOUSTON SHIP CHANNEL, TX.

Operations during fiscal year. New Work: The construction contract for dredging the remaining entrance channel and jetty area, awarded March 19, 1999, was physically completed in March 2000 and incurred a cost of $24,040,274 for FY 00. Construction contract for dredging Lower Bay, awarded September 4, 1998, continued through FY 00 at a cost of $32,799,150. The construction contract for dredging Upper Bayou, awarded October 26, 1998, continued through FY 00 at a cost of $4,912,288 for the year. The contract to construct an oyster reef, awarded March 12, 1999, was physically completed in July 2000 for a FY 00 cost of $12,420,249. A construction contract for dredging Upper Bay was awarded January 19, 2000, and continued through FY 00 at a cost of $11,871,049. The contract to dredge Lower Bayou was awarded April 21, 2000 and continued through FY 00 at a cost of $5,351,938.

Maintenance: See Section 9, GALVESTON HARBOR AND CHANNEL, TX and Section 12, HOUSTON SHIP CHANNEL, TX for maintenance of existing channels. (See Table 40-J for dredging operations.)

12. HOUSTON SHIP CHANNEL, TX

Location. Connects Galveston Harbor, at a point opposite Port Bolivar, with city of Houston, Texas, extending 50 miles northwesterly across Galveston Bay through San Jacinto River and Buffalo Bayou to a turning basin at head of Long Reach with light-draft channel 5 miles long from turning basin to Jensen Drive, Houston. (See National Ocean Survey Charts 11324/5, 11327, 11328, and 11329.)

Previous project. For details see page 1856 of Annual Report for 1915.

Existing project. Provides for channel dimensions in sections of the waterway shown in Table 40-H.

Also provides for certain cut-offs, for easing sharp bends, an earthen dam across the upper end of Turkey Bend, and for off-channel silting basins as deemed necessary by the Chief of Engineers. Construction of 26,000 linear feet of pile dike to protect the channel in upper Galveston Bay was deauthorized by Sec. 12 of PL 93-251. The 40-foot project was completed in March 1966. Dredging a channel in Greens Bayou to Mile 1.57 was completed in 1970. Dredging Greens Bayou, Mile 1.57 to Mile 2.73, has been deauthorized. See Section 11, HOUSTON-GALVESTON NAVIGATION CHANNELS, TX for work authorized by the Water Resources Development Act of 1996. (See Table 40-G for total cost of existing project to September 30, 2000.)

Mean tidal range under ordinary conditions is 0.6 foot to 1.3 feet in lower part of Galveston Bay; 0.6 foot to 1.3 feet in upper bay; and 0.5 to 1 foot in San Jacinto River and Buffalo Bayou. Extreme ranges under ordinary conditions are about 2 feet, 1.2 feet and 1 foot, respectively. Freshets caused rises of over 12 feet in Buffalo Bayou; however, this condition has not occurred since completion of Addicks and Barker Dams for flood control on upper watershed of Buffalo Bayou. Height of tides is dependent largely on the wind, and during strong “northers” in winter season the water surface may be depressed 2 feet below mean low tide.

Local cooperation. Fully complied with for Houston Ship Channel. Local Cooperation Agreement for assumption of maintenance on Bayport Ship Channel was executed April 6, 1993. Local Cooperation Agreements for assumption of maintenance on Barbour Terminal Channel and Greens Bayou Channel were both executed on February 8, 1994.

Terminal facilities. City of Houston and Port of Houston Authority operate modern terminals which supplement privately owned wharves, piers, and docks, as described in Port Series No. 24 (revised 1989), Corps of Engineers. Facilities are considered adequate for existing commerce.

Operations during fiscal year. New Work: See Section 11, HOUSTON-GALVESTON NAVIGATION CHANNELS, TX.

Maintenance: A contract for emergency levee relocation of the Rosa Allen Placement Area was awarded October 29, 1999, and completed in FY 00 for a cost of $2,297,768. (See Table 40-J for dredging operations.) See Section 11, HOUSTON-GALVESTON NAVIGATION CHANNELS, TX.

13. MATAGORDA SHIP CHANNEL, TX

Location. This is a consolidation of shallow draft channel improvements of "Channel from Pass Cavallo to Port Lavaca, Texas," and deep draft channel improvements authorized under "Matagorda Ship Channel, Texas." Bar at Pass Cavallo is 125 miles southwest of Galveston entrance and 54 miles north of Aransas Pass. It connects Matagorda Bay with the gulf. Project extends across Matagorda Bay and Lavaca Bay to towns of Port Lavaca and Point Comfort. These two towns are on opposite sides of Lavaca Bay and both are about 26 miles northwest from Pass Cavallo. (See National Ocean Survey Chart 11316.)

Existing project. Existing project dimensions provided for in various channels and basins are listed in Table 40-H on channel dimensions.

Project also provides for dual jetties at entrance, south jetty extending 6,000 feet to 24-foot depth in the gulf and north jetty extending 5,900 feet to 24-foot depth. Under ordinary conditions mean tidal range is about 1 foot and extreme range about 2 feet. Height of tide is dependent largely on the wind, and during strong "northers" in winter season the water surface may be depressed 2 feet below mean low tide. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. Fully complied with.

Terminal facilities. Privately owned facilities at Port Lavaca, municipally owned facilities at mouth of Lynn bayou, privately owned and publicly owned facilities at Point Comfort, Texas. These facilities are considered adequate for present commerce. Facilities at Point Comfort consist of a channel, turning basin with wharfs, oil dock and loading equipment, all owned by Aluminum Company of America; and a wharf built by local interest at Point Comfort turning basin.

Operations during fiscal year. Maintenance: Routine maintenance. (See Table 40-J for dredging operations.)

14. NECHES RIVER AND TRIBUTARIES, SALT WATER BARIER AT BEAUMONT TX

Location. The project is located just below the Big Thicket National Preserve and the confluence of Pine Island Bayou and the Neches River at Beaumont, Texas, in Jefferson and Orange Counties on the upper coast of Texas. (See National Ocean Survey Chart 11343.)

Existing project. The project will provide for an overflow dam in the Neches River, a gated salt water barrier consisting of five 56 feet by 24.5 feet tainter gates; a gated navigation bypass channel with a clear opening of 56 feet and a depth of 16 feet; an access road and levee; and an auxiliary dam across a canal which drains an adjacent bayou. Estimated cost for new work is $42,384,000 Federal (Corps) and $14,128,000 non-Federal consisting of $8,389,000 contributed funds, $222,000 for lands, $5,517,000 for relocations. (October 1, 2000 base price.)

The project was authorized for construction in the Water Resources Development Act of 1976 (Sec. 102, PL 94-587). The construction contract was awarded September 18, 2000 and work began in October.

Local cooperation. Local Sponsor for the project is the Lower Neches Valley Authority. Report of the Chief of Engineers for the Water Resources Development Act of 1976 authorization cited a 1974 Waterways Experiment Station report, which concluded that 75 percent of the salinity in the Neches River at Beaumont was due to the Federal deep draft navigation project to Beaumont and 25 percent was due to withdrawals by water users. From 1994 to 1996, the Corps reevaluated the project which resulted in a May 1997 decision by the Assistant Secretary of the Army (Civil Works), to direct that the project go forward with 75 percent Federal / 25 percent non-Federal cost-sharing as a navigation mitigation project. In October 1999, the Assistant Secretary of the Army (Civil Works) issued a decision stating that operations and maintenance will also be cost-shared as 75 percent Federal and 25 percent non-Federal. A Project Cooperation Agreement was executed on May 22, 2000.

Terminal facilities. None.

Operations during fiscal year. New Work: The architectural, engineering and design contract was

completed in FY 00 at a fiscal year cost of $476,221. The contract to construct the saltwater barrier and the other project features was awarded September 18, 2000. No cost was incurred for FY 00.

15. SABINE-NECHES WATERWAY, TX

Location. This is a consolidation of old improvements of "Harbor at Sabine Pass and Port Arthur Canal" and "Sabine-Neches Canal, including Sabine River to Orange and Neches River to Beaumont, Texas." Sabine Pass is on Gulf of Mexico about 58 miles east of Galveston and 280 miles west of Southwest Pass, Mississippi River. It connects Sabine Lake with gulf. Port Arthur canal extends 7 miles from near upper end of Sabine Pass to Port Arthur docks at mouth of Taylors Bayou. Near its upper end, Sabine-Neches canal joins and extends to mouths of Neches and Sabine Rivers. Waterway next extends up Neches River to Beaumont and up Sabine River to Orange. (See National Ocean Survey Charts 11341, 11342, and 11343.)

Previous projects. For details see page 1863 of Annual Report for 1915, page 985 of Annual Report for 1916, and page 873 of Annual Report for 1926.

Existing project. Existing project dimensions provided for in various channels and basins are set forth in Table 40-H on channel dimensions. Project also provides for two stone jetties at Sabine Pass entrance from the gulf, western jetty to be 21,905 feet long and eastern jetty 25,310 feet long. Project further provides for removal of guard lock in Sabine-Neches Canal, construction of suitable permanent protective works along Sabine Lake frontage owned by city of Port Arthur to prevent dredged material from entering Sabine Lake and to prevent erosion of material deposited, reconstruction of Port Arthur Bridge, and relocation of Port Arthur field office. Mean tidal variation at entrance is about 1.5 feet, at Port Arthur about 1 foot, and at Orange and Beaumont about 0.5 foot. Prolonged north winds during winter season have depressed water surface as much as 3.4 feet below mean low tide while tropical disturbances have caused heights as much as 8 feet above mean low tide.

Existing project is complete. Removal of obstructive bridge at Port Arthur was completed May 1969. The high level fixed bridge across Sabine-Neches Canal was completed October 1970. Deepening project to 40 feet was completed April 1972. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. Complied with.

Terminal facilities. See volume 2, Port Series No. 22 (revised 1988), Corps of Engineers. Facilities are considered adequate for present commerce.

Operations during fiscal year. Maintenance: Routine Maintenance. A construction contract to repair the road on Placement Areas No. 8 and No. 11 awarded August 31, 1999, was completed in FY 00 at a cost of $1,895,864. A contract to repair the spillway pipes on the north spill box of Placement Area No. 11 was awarded September 29, 2000 and incurred a cost of $23,876 for FY 00. A contract for dewatering Placement Area No. 8 was awarded September 5, 2000 and a cost of $50,000 was expended in FY 00. Mosquito control spraying was performed in FY 00 for $58,006. (See Table 40-J for dredging operations.)

16. TEXAS CITY CHANNEL, TX

Location. Texas City is on the mainland of Texas on west side of Galveston Bay, about 10 miles northwest of city of Galveston. (See National Ocean Survey Charts 11324/5.)

Previous projects. For details see page 1856 of Annual Report for 1915.

Existing project. Provides for channel 40 feet deep, 400 feet wide and about 6.75 miles long, from Bolivar Roads to a turning basin at Texas City, 40 feet deep, 1,000 feet to 1,200 feet wide and 4,253 feet long; and an Industrial Canal, 40 feet deep and 300-400 feet wide extending a distance of 1.7 miles southwestward from the south end of Texas City Turning Basin, and a turning basin, 40 feet deep, 1,000 feet wide and 1,150 feet long.

Project also provides for easing the approach to the turning basin; a pile dike 28,200 feet long, parallel to and north of the channel; and a rubble-mound dike, 27,600 feet long, along the southerly side of the pile dike.

The 40-foot channel was completed in June 1967. Widening the Texas City Turning Basin; realigning the Texas City Turning Basin to a location 85 feet easterly from its present position; and enlargement through widening and deepening of the Industrial Canal and basins was initiated in July 1980 and completed in June 1982. The only work remaining is deferred construction consisting of widening the Industrial Canal from 250 feet to 300 feet at 40 foot depth.

Work authorized by Water Resources Development Act of 1986 would modify the project by providing for deepening the Texas City Turning Basin to 50 feet, enlarging the 6.7-mile long Texas City Channel to 50 feet by 600 feet, deepening the existing 800-foot wide Bolivar Roads Channel and Inner Bar Channel to 50 feet, deepening the existing 800-foot wide Outer Bar and Galveston Entrance Channel to a 52-foot depth for 4.1 miles at a width of 800 feet and an additional reach at a width of 600 feet to the 52 foot contour in the Gulf of Mexico. Establishment of 600 acres of wetland and development of water-oriented recreational facilities on

a 90-acre enlargement of the Texas City Dike are also proposed. The project is currently in the "deferred" category. (See Table 40-G for total cost of existing project to September 30, 2000.)

Under ordinary conditions mean tidal range is about 1.3 feet and extreme range is about 2 feet. Height of tide is dependent largely on the wind and during strong "northers" water surface may be depressed 2 feet below mean low tide. Estimated cost for new work is $123,300,000 Federal (Corps), excluding expenditures on previous projects, and $74,393,700 non-Federal, including $62,027,741 contributed funds, $248,000 work contribution, $427,959 lands, $10,737,000 levees and spillways, $6,000 for removal of barge mooring facilities from Shoal Point (formerly known as Snake Island), $561,000 for berthing areas, and $386,000 relocations. (October 1, 1988 base price.)

Local cooperation. Fully complied with for completed work. For work authorized by the Water Resources Development Act of 1986, as amended, local interests are required to provide lands, easements, rights-of-way, and disposal areas; relocate utilities, roads, and other facilities, except railroad bridges; provide berthing areas; pay one-half of the separable and joint costs allocated to recreation; and bear all costs of operation, maintenance and replacement of recreation facilities, and, during construction, pay 25 percent of the costs allocated to deep-draft navigation to a depth of 45 feet plus 50 percent of the costs allocated to deep-draft navigation deeper than 45 feet; pay an additional 10 percent of the costs allocated to deep-draft navigation within a period of 30 years following completion if not offset by credit allowed for lands, easements, rights-of-way, relocations and disposal areas; and pay 50 percent of the costs incurred for operation and maintenance below the 45-foot depth.

Terminal facilities. Privately owned terminal facilities are on the mainland at inner end of this channel and are considered adequate for existing commerce. A deep-draft channel and turning basin extend about 1.9 miles southwestward from south end of Texas City Turning Basin have been constructed by local interests. See Port Series No. 23 (revised 1996), Corps of Engineers.

Operations during fiscal year. Maintenance: No maintenance was required for the fiscal year. (See Table 40-J for dredging operations.)

17. TRINITY RIVER AND TRIBUTARIES, TX

Location. The main stem of the Trinity River is formed at Dallas by the confluence of the West Fork and the Elm Fork at river mile 505.5. The mouth of the Trinity is about one-half mile west of Anahuac, Texas. (See Geological Survey base map, Texas, scale 1:500,000.)

Previous project. For details of abandoned locks and dam construction see page 986 of Annual Report for 1933.

Existing project. See individual detailed reports on Anahuac Channel, Channel to Liberty and Wallisville Lake. Project includes the existing Federal project designated as "Mouth of Trinity River, Texas," which was completed in 1907 at a cost of $80,000 (no cost to local interest). Project is not being maintained. (See Table 40-G for total cost of existing project to September 30, 2000.)

Local cooperation. See individual detailed reports on Channel to Liberty and Wallisville Lake. There is no local cooperation required for Anahuac Channel.

Terminal facilities. Privately owned wharves and piers at Anahuac, Moss Bluff, Wallisville, and Liberty, Texas, are adequate for existing commerce.

17A. ANAHUAC CHANNEL, TX

Location: Extends from 6-foot depth in Galveston Bay to Anahuac, Texas, opposite mouth of Trinity River 38 miles north of Galveston, Texas. (See National Ocean Survey Chart 11323.)

Existing project. No project dimensions authorized by 1905 River and Harbor Act. A 6- by 80-foot channel, 16,000 feet long was dredged in 1905. At present a 6- by 100-foot channel is maintained. Under ordinary conditions tidal range is 0.6 to 1.2 feet. Height of tide is dependent largely on wind. Strong north winds depress water surface 1.5 feet below mean sea level. Latest published map is in House Document 440, 56th Congress, 1st Session. Project was completed in 1911.

Local cooperation. None required.

Terminal facilities. Privately owned wharves and piers are the only terminal facilities at Anahuac.

Operations during fiscal year. Maintenance: No work was incurred during the fiscal year.

17B. CHANNEL TO LIBERTY, TX

Location. Improvement is located in Galveston Bay and tidal reach of lower Trinity River. (See Geological Survey Maps for Anahuac, Cove, Moss Bluff, and Liberty, Texas.)

Previous projects. For details see page 986 of Annual Report for 1932.

Existing project. Provides for a 6-foot channel from Anahuac to Liberty, which was completed in 1925. A navigable channel from the Houston Ship Channel near Red Fish Bar in Galveston Bay to Liberty, Texas, with depth of 9 feet and width of 150 feet, extending along the east shore of Trinity Bay to the mouth of the

Trinity River at Anahuac, thence in the river channel to a turning basin at Liberty, Texas, and a protective embankment along the west side of the channel in Trinity Bay.

The 6-foot Channel to Liberty was completed in 1925. The 9-foot Channel to Liberty has been dredged from junction with Houston Ship Channel to a point one mile below Anahuac, Texas. Work remaining consists of dredging a 9- by 150-foot channel from one mile below Anahuac, Texas to Liberty, Texas.

Local cooperation. Fully complied with for portion of "Channel to Liberty" between Houston Ship Channel and 1 mile below Anahuac, Texas, as required by 1946 River and Harbor Act (H. Doc. 634, 79th Cong., 2nd Sess.), but not complied with for remaining portion of "Channel to Liberty" as required by River and Harbor Act of 1945 (H. Doc. 403, 77th Cong., 1st Sess.).

Terminal facilities. Privately owned wharves and docks at Anahuac, Wallisville, Texas Gulf Sulphur Co.'s slip, Moss Bluff and Liberty, Texas, are adequate for existing commerce.

Operations during fiscal year. Maintenance: Routine maintenance. (See Table 40-J for dredging operations.)

17C. WALLISVILLE LAKE, TX

Location. Dam is at river mile 3.9, about 4 miles northwest of Anahuac, Texas. (See National Ocean Survey Chart 11323.)

Existing project. Provides for construction of a dam and overflow spillway approximately 8 miles long to prevent salinity intrusion and create a 3,800 acre reservoir. The maximum pool elevation will be 2 feet above National Geodetic Vertical Datum. (The reservoir was reduced from 5600 acres with a maximum pool elevation of 4 feet N.G.V.D. by agreement to protect the endangered bald eagle.) Project provides for an 84 foot by 600-foot navigation lock to facilitate navigation on Channel to Liberty. The sill has a depth of minus 16 feet below National Geodetic Vertical Datum. Project also provides for two recreational areas; and three water control structures to control salinity intrusion and regulate freshwater flows to the saltwater marsh west of the river. Dam controls a drainage area of 1,262 square miles below Livingston Dam (non-Federal project at channel mile 99.2) and has a storage capacity of 14,000 acre-feet. Under ordinary conditions mean tidal range in bay is from 0.6 foot to 1.2 feet. Height of tide is dependent largely on wind. Strong northerly winds depress water surface 1.5 feet below mean sea level. Total estimated cost of authorized project is $81,200,000 Federal (Corps). (October 1, 2000 base price.)

A contract for construction of access road, Big Hog intake structure, intake canal and access bridge was completed in October 1968. Work started in July 1970 on construction of the lock and dam, roads, diversion channel, and navigation channel. Work was suspended in February 1973 because of an injunction halting construction. Protective work on the lock and dam was permitted and was completed in April 1973. An exception to the injunction was granted for plugging oil wells which was completed in August 1973. Notice of appeal to the Court of Appeals for the Fifth Circuit was filed in April 1973. In August 1974, the Court of Appeals reversed the judgment and remanded the case with directions that a revised or supplemental statement be prepared and judged anew. Final supplement to the Environmental Impact Statement for the modified project authorized in the Supplemental Appropriations Act, 1983 (PL 98-63) was submitted to the Environmental Protection Agency on September 21, 1983.

In March 1986, the Court rendered its Memorandum of order continuing the injunction and directing the Corps to recommence the administrative process at the time when the first departure from standard NEPA procedures occurred prior to the 1983 legislative action. The Corps and Local Sponsors perfected an appeal to the U.S. Court of Appeals and on May 11, 1987, the Court of Appeals ruled in favor of the Corps and dismissed the suit in its entirety.

The Energy and Water Development Appropriation Act of 1991 provided $9,200,000 for the project and directive language for continuation of construction.

In the fall of 1989, a pair of bald eagles were discovered nesting at the project site which led to additional consultation under the Endangered Species Act. Solicitation of the contract for the non-overflow dam was postponed to allow for environmental coordination. An Environmental Assessment was prepared with a Finding of No Significant Impact (FONSI) which was signed in September 1991. Environmental documents were approved and construction was resumed.

A contract to rehabilitate and complete the navigation lock, complete the North and South navigation channels, construct a new administrative/resident office building, and electrical and mechanical equipment controls for the controlled spillway structure was awarded in December 1995 and completed in FY 99. A dedication ceremony for the Wallisville Lake Project was held on November 1, 1999.

Construction of Control Structure A was completed in February 2000 and Cedar Hill Park was completed in October 2000.

Work remaining consists of repairs to the West Non-Overflow Dam and construction of public use facilities, remediate abandoned dam and remove skimmers, replace timbers and construct a boat ramp and dock.

Local cooperation. Local interest must contribute an amount equal to cost allocated to water supply, one-half of cost allocated to salinity control and cost allocated to recreation less cost of basic facilities and less 15 percent of total project cost. Local interest reimbursement is estimated at $12,180,000.

Operations during fiscal year. New Work: The architect/engineering contract, awarded April 4, 1994 to prepare plans and specifications and cost estimates for lock rehabilitation and construction of new facilities, completed the design in 1996 and completed providing construction phase services at a cost of $15,646 for FY 99. The construction contract for lock rehabilitation and construction of new facilities, awarded December 22, 1995, was completed in FY 99 at a cost of $2,428,791. A construction contract for Control Structure A, awarded January 27, 1999 and physically completed in February 2000, incurred a cost of $1,161,033 for FY 99 and $959,447 in FY 00. A contract to construct Cedar Hill Park was awarded February 28, 2000 and physically completed in October 2000 for a cost of $614,448 for FY 00. Vegetation was removed along the access road for a cost of $144,428. The contract was awarded April 27, 2000 and completed in 2000. A contract for repairs to the west non-overflow dam and construction of public use facilities was awarded August 7, 2000 and continued through FY 00 at a cost of $298, 416.

Maintenance: The Wallisville Lake Project was turned over for permanent operations at the beginning of FY 00. The project was operated and maintained at a cost of $878,892.

18. RECONNAISSANCE AND CONDITION SURVEYS

Reconnaissance and condition surveys were conducted in FY 2000 at a total cost of $15,777. The surveys were on the following projects:

Greens Bayou	Jan-Jul 00
Chocolate Bayou	Apr-Aug 00
Barbour Terminal	May 00
Texas City Ship Channel	Dec 99- Aug 00

19. NAVIGATION WORK UNDER SPECIAL AUTHORIZATION

Navigation activities pursuant to Section 107, Public Law 86-645 (preauthorization):

Initial coordination for Section 107 navigation activities was performed in FY 00 at a cost of $3,190.

Mitigation of shore damages attributable to navigation projects pursuant to Section 111, Public Law 90-483:

No mitigation of shore damages studies were performed in FY 99.

Shore Protection

20. CORPUS CHRISTI BEACH, TX (RESTORATION PROJECT)

Location. Corpus Christi Beach, a shore area having a length of about 2 miles, is located on the west side of Corpus Christi Bay in Nueces County at Corpus Christi, Texas. (See National Ocean Survey Charts 11309 and 11311.)

Existing project. The plan of improvement provided for initial restoration of eroded areas of Corpus Christi Beach, over a shore length of 1.4 miles, located on the easterly side of Rincon Peninsula, with periodic nourishment as required. Construction was completed in March 1978. Periodic nourishment and construction of sand retention groin was completed in November 1985.

Local cooperation. Fully complied with.

Operations during fiscal year. Section 934 of Water Resources Development Act of 1986 provides for extension of nourishment period to 50 years for beach nourishment projects. A study to determine the appropriateness of such an extended nourishment period for the Federal beach nourishment project was completed. The study indicated that there was no economic justification for continued Federal participation in the program. The responsibility for beach monitoring and maintenance was transferred to the City of Corpus Christi in July 1990. The project was financially closed out in FY 99.

Flood Control

21. BUFFALO BAYOU AND TRIBUTARIES, TX

Location. Improvements are on Buffalo Bayou watershed, a part of San Jacinto River watershed, in Harris County, west and northwest of city of Houston, Texas. (See Geological Survey quadrangle sheets for Harris County.)

Existing project. Provides for improvements of Buffalo Bayou and its tributaries above turning basin of Houston Ship Channel to control floods for protection

of city of Houston, and prevent deposition of silt in turning basin of ship channel by construction of detention reservoirs, enlargement and rectification of channels and construction of control works.

Channel rectification on Brays Bayou with an improved channel length 25.4 miles was completed in March 1971. Channel rectification on White Oak Bayou was completed in 1976. Work remaining consists of rectification of approximately 22 miles of main stem of Buffalo Bayou.

See individual detailed reports on Addicks and Barker Reservoirs; and Brays, Greens, Halls, Hunting, Little White Oak, and Carpenters Bayous.

Local cooperation. Section 203, 1954 Flood Control Act applies. Local interests have accomplished all required local cooperation on Brays Bayou and White Oak Bayou. On Buffalo Bayou, local interests purchased interests that the United States had in 7 miles of rectified channel below Barker and Addicks Dams for $256,651. Of the remaining required rights-of-way on Buffalo Bayou, local interests have acquired about 40 percent. About 53 percent of required bridge relocations and 3 percent of the required bridge relocations have been accomplished. Advance of $4,400,000 by the Harris County Flood Control District was refunded in September 1956. Public Law 86-53 authorized reimbursement of $38,726 to Galveston, Houston and Henderson Railroad Company for bridge alterations at Brays Bayou. Non-Federal contributions totaled $63,661 for project betterment. Recreation development is subject to conditions of non-Federal cost-sharing under Federal Water Project Recreation Act of 1965.

See individual detailed reports on Addicks and Barker Reservoirs; and Brays, Greens, Halls, Hunting, Little White Oak, and Carpenters Bayous.

21A. ADDICKS AND BARKER RESERVOIRS, TX

Location. Reservoirs are located in and west of the City of Houston in Harris and Fort Bend Counties, Texas.

Existing project. Construction of Barker Dam was complete in February 1945. Construction of Addicks Dam and 7.4 miles of channel rectification downstream from Addicks and Barker Dams was completed in October 1948. Modification of Barker and Addicks Dams consisting of gating the final two uncontrolled conduits in each dam, was complete in 1963. Major rehabilitation of Addicks and Barker Dams to prevent seepage through the embankment was completed in 1982.

Work under the Dam Safety Assurance program was initiated in Fiscal Year 1986. Work accomplished included raising approximately 32,400 feet of Addicks Dam 1 to 3 feet and raising approximately 57,600 feet of Barker Dam 3 to 5 feet and armor-plating low ends of both dams. A contract with the city of Houston for cost-sharing in the construction of recreation facilities was entered into in November 1981. The lease for approximately 10,534 acres of land and water areas was approved in February 1983.

Local cooperation. None required.

Operations during fiscal year. Recreation: Community Park West (Phase IB) and the velodrome were completed in 1986 and remain in use. Community Park West (Phase 4) and the development of Community Park 2 (soccer fields, ball fields, and parking lots) were completed by the City of Houston in 1992. Harris County Precinct 3 completed building additional soccer fields in Community Park 2 in George Bush Park. The Fort Bend County YMCA pavilion, archery range, and nature trails in Barker Reservoir are being heavily used. Maintenance and improvements of these recreation areas continue by all agencies.

Maintenance: A contract to install, maintain and repair piezometers at Addicks and Barker was awarded and completed in the summer of 2000 for a cost of $98,965.

Construction contracts to rehabilitate and improve the parking and storage areas at the project site and to repair about 20,000 feet of road on top of Barker Dam and about 10,000 feet of road on top of Addicks Dam are planned for next fiscal year.

21B. BRAYS BAYOU

Location. The project is located in the south-central portion of Buffalo Bayou, Harris County, TX.

Existing project. The authorized plan of improvement consists of 3 miles of stream improvements, 3 flood detention basins, and 7 miles of stream diversion channels. Aesthetic vegetation is included. Recreation facilities include trails, picnic facilities, sports fields, comfort stations and parking areas. The estimated cost for new work is $266,900,000 Federal (Corps) and $157,177,000 non-Federal consisting of $23,487,000 cash contributions, and $133,690,000 for lands and relocations (October 2000 base price).

The project was authorized for construction in the Water Resources Development Act of 1990 (PL 101-640). In 1995, the project was divided into two separable elements, a Detention Element (stream improvements and detention basins) and a Diversion Element. The Local Sponsor was authorized to develop the project and design and construct an alternative to the diversion component and be reimbursed for the Federal share by the Water Resources Development Act of 1996

(PL 104-303). Construction funds were received in 1998.

Location cooperation. Local Sponsor for the project is Harris County Flood Control District. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; pay five percent of the total costs allocated to flood control presently estimated at $23,487,000 and bear all costs of operation, maintenance, and replacement of flood control and recreation facilities. A Project Cooperation Agreement for the detention element was executed March 3, 2000.

Operations during fiscal year. New Work: Construction by the Local Sponsor of the Detention Element is currently underway. Reimbursement to Harris County Flood Control District was made in July 2000 for the following completed segments of the Sam Houston Detention Basin: Discrete Segment #1, Compartment 3- $1,916,116; Discrete Segment #3, Compartment 1, Phase 1- $1,156,012; and Discrete Segment #4, Compartment 1, Phase 2- $1,810,635.

In accordance with Section 211 of the Water Resources Development Act of 1996, the sponsor is investigating the Diversion element in an effort to find an alternative to the authorized project.

21C. GREENS BAYOU

Location. The project is located in the north-central portion of Buffalo Bayou, Harris County, TX, and does not include the Halls Bayou tributary.

Existing project. The authorized plan of improvement consists of 25 miles of stream enlargements, 14 miles of stream clearing and 4 flood detention basins. Aesthetic vegetation and mitigation is included. Recreation facilities include trails, picnic facilities, sports fields, launches, ramps, comfort stations and parking areas. The estimated cost for new work is $160,251,000 Federal (Corps) and $97,307,000 non-Federal consisting of $15,215,000 cash contributions, and $82,092,000 for lands and relocations (October 2000 base price).

The project was authorized for construction in the Water Resources Development Act of 1990 (PL 101-640).

Local cooperation. Local Sponsor for the project is Harris County Flood Control District. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide a cash contribution presently estimated at $15,215,000 and bear all costs of operation, maintenance, and replacement of flood control and recreation facilities.

Operations during fiscal year. New Work: See Section 37, PRE-CONSTRUCTION ENGINEERING AND DESIGN.

21D. HALLS BAYOU

Location. Halls Bayou is a major tributary of Greens Bayou, located in the north-central portion of Buffalo Bayou, Harris County, TX.

Existing project. The authorized plan of improvement consists of 18 miles of stream improvements. Recreation facilities include trails, picnic facilities, boat ramps, a comfort station and parking areas. The estimated cost for new work is $70,908,000 Federal (Corps) and $52,871,000 non-Federal consisting of $7,921,000 cash contributions, and $44,950,000 for lands and relocations (October 2000 base price).

The project was authorized for construction in the Water Resources Development Act of 1990 (PL 101-640).

Local cooperation. Local Sponsor for the project is Harris County Flood Control District. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide a cash contribution presently estimated at $7,921,000 and bear all costs of operation, maintenance, and replacement of flood control and recreation facilities.

Operations during fiscal year. New Work: Project is awaiting Pre-construction Engineering and Design funds.

21E. HUNTING BAYOU

Location. Hunting Bayou is located in Houston, approximately 4 to 5 miles from the central business district.

Existing project. The authorized plan of improvement consists of 14.3 miles of stream improvements. Recreation facilities include trails, picnic facilities, a comfort station and parking areas. The estimated cost for new work is $69,992,000 Federal (Corps) and $62,730,000 non-Federal consisting of $7,102,000 cash contributions, and $55,628,000 for lands and relocations (October 2000 base price).

The project was authorized for construction in the Water Resources Development Act of 1990 (PL 101-640). The Local Sponsor was authorized to design and construct an alternative to the project and be reimbursed for the Federal share by the Water Resources Development Act of 1996 (PL 104-303).

Local cooperation. Local Sponsor for the project is Harris County Flood Control District. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide

a cash contribution presently estimated at $7,102,000 and bear all costs of operation, maintenance, and replacement of flood control and recreation facilities.

Operations during fiscal year. New Work: See Section 37, PRE-CONSTRUCTION ENGINEERING AND DESIGN.

21F. LITTLE WHITE OAK BAYOU, TX

Location. Little White Oak Bayou is a tributary of White Oak Bayou in north-central Houston.

Existing project. The authorized plan of improvement consists of 6.0 miles of stream enlargements. Recreation facilities include trails and picnic facilities. The estimated cost for new work is $17,958,000 Federal (Corps) and $17,957,000 non-Federal consisting of $1,996,000 cash contributions, and $15,961,000 for lands and relocations (October 1990 base price).

The project was authorized for construction in the Water Resources Development Act of 1990 (PL 101-640).

Local cooperation. Local Sponsor for the project is Harris County Flood Control District. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide a cash contribution presently estimated at $1,996,000 and bear all costs of operation, maintenance, and replacement of flood control and recreation facilities.

Operations during fiscal year. New Work: Project is awaiting Pre-construction Engineering and Design funds.

21G. CARPENTERS BAYOU, TX

Location. Carpenters Bayou is a tributary of Buffalo Bayou in northeastern Houston.

Existing project. The authorized plan of improvement consists of 9.7 miles of stream enlargements. Recreation facilities include trails and picnic facilities. The estimated cost for new work is $3,900,000 Federal (Corps) and $1,950,000 non-Federal consisting of $370,000 cash contributions, and $2,320,000 for lands and relocations (October 1990 base price).

The project was authorized for construction in the Water Resources Development Act of 1990 (PL 101-640).

Local cooperation. Local Sponsor for the project is Harris County Flood Control District. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide a cash contribution presently estimated at $370,000 and bear all costs of operation, maintenance, and replacement of flood control and recreation facilities.

Operations during fiscal year. New Work: Project is awaiting Pre-construction Engineering and Design funds.

22. BUFFALO BAYOU, TX (LYNCHBURG PUMP STATION)

Location. The project is located 10 miles east of Houston, Texas near the entrance to the Houston Ship Channel.

Existing project. The Lynchburg Pump Station is to be protected by a flood barrier encircling the facility. A plan consisting of a combination sheet pile wall and earth levee is recommended. Total barrier length is approximately 2000 feet. The Crosby-Lynchburg Road will be rerouted to the top of the levee.

Local cooperation. The Coastal Water Authority, owned by the City of Houston, is the Local Sponsor of the project.

Operation during the fiscal year. The Detailed Project Study was completed in September 1996. An implementation plan in the amount of $5,985,000 has been tentatively agreed upon by the Local Sponsor, subject to approval by higher authority of the Corps of Engineers. Pending resolution of Project Cooperation Agreement issues, construction could be initiated in FY 2002 if funds are available.

23. CLEAR CREEK, TX

Location. The project is located about midway between the two metropolitan centers of Houston, Texas, on the north and Galveston-Texas City on the south in Harris and Galveston Counties above and below existing Clear Lake.

Existing project. The authorized plan of improvement consists of an improved channel from Mile 3.8 to Mile 34.8 to contain within its banks all flood flows up to and including that of a 100-year flood. The selected plan provides channel enlargement and easing of bends within the existing stream from Mile 3.8 to Mile 26.05 to contain at least the 10-year frequency storm, and additional outlet with gated structure from Clear Lake to Galveston Bay, restriction of development in the residual 100-year flood plain and measures to mitigate environmental effects. In 1986, at the request of Brazoria County Drainage District No. 4, that portion of the project upstream of the Brazoria/Galveston County line, approximate improved Mile 19.1, was placed in the "inactive" category. Estimated cost for new work, excluding "inactive" portion, is $80,393,000 Federal (Corps) and $55,464,000 non-Federal consisting of $6,792,000 cash contributions, $22,600,000 for lands,

and $26,072,000 for relocations (October 1, 2000 base price).

Environmental interest groups and agencies, private citizens, and some local communities located near or adjacent to Clear Lake expressed opposition to the Clear Creek Flood Control Project as currently authorized and planned for upstream reaches. In general, the opposition to the project has been focused on environmental concerns in the upstream reaches and on induced flooding concerns downstream in Clear Lake. Construction has been delayed at the request of the Local Sponsor so that an alternative to the authorized project can be developed that will reduce above concerns and still provide flood protection to those that are critically affected by flood waters in the watershed.

Local cooperation. Local Sponsors for the project are Galveston and Harris counties. The Local Cooperation Agreement, executed June 30, 1986, requires local interests to provide lands, easements, rights-of-way, and material disposal areas; modify or relocate building, pipelines, utilities, roads and other facilities, except railroad bridges, where necessary in the construction of the project; make a cash contribution for mitigation measures consistent with the non-Federal share of total project costs without mitigation measures; pay five percent of the total costs allocated to flood control; and bear all costs of operation and maintenance of flood control facilities.

Operations during fiscal year. Preparation of the General Reevaluation Report (GRR) continued. The Galveston District and the local sponsors for the General Reevaluation study (Harris County Flood Control District, Galveston County, and Brazoria Drainage District No. 4) updated the databases for the Clear Creek watershed and prepared for the initial public meeting. The database update included state-of - the-art aerial photogrammetry, new surveys that included elevations of over 3000 homes and structures, and new demographic and socioeconomic information.

Six years of litigation between the Corps of Engineers, Harris County and the Southern Pacific Transportation Company over a proposed replacement bridge came to an end. A final settlement of $1,113,855.43 was received to reimburse the initial $905,000 placed in the court's escrow account in 1995 and the interest earned in the amount of $208, 855.43.

24. CYPRESS CREEK, TX

Location. The project is located north of Houston, Texas in Harris County.

Existing project. The authorized plan of improvement consists of enlargement of the lower 29.4 miles of the Cypress Creek Channel, incorporating grassed side slopes and channel bottom and appropriate erosion control measures; application of floodplain management techniques in the residual floodplain; construction of project-oriented recreation features, including 11.5 miles of hike-and-bike trails and related facilities for health, safety, and public access; and habitat management measures on 844 acres of Harris County Parkway land, creation of wooded and brush habitat along 100 acres of the project right-of-way, acquisition of 329 acres of wildlife habitat along the creek, and creation of 35 acres of ponds and marshes. The authorized plan is no longer under consideration. The current plan is to buy out or raise houses where inhabitants are at or below the five year flood level. Estimated cost for the new plan is $4,463,000 Federal (Corps) and $1,487,000 non-Federal contribution. (October 1, 1999 base price.)

Local cooperation. Local Sponsor for the project is Harris County. The non-Federal share of the cost of non-structural flood control measures shall be 25 percent of the cost of such measures. The non-Federal interests for any such measures shall be required to provide all lands, easements, rights-of-way, and relocations necessary for the project, but shall not be required to contribute any amount in cash during construction of the project.

Operations during fiscal year. New work: Work during FY 2000: The General Reevaluation Report was approved September 27, 1999-just prior to FY 2000. The revised project consisted of removing the 35 homes from the five year flood level. The sponsor wished to implement the project as quickly as possible; therefore, the Harris County Flood Control District and the Corps of Engineers negotiated a Section 215 Agreement. This agreement would provide reimbursement to the sponsor for the Federal share of funds expended to implement the project once a Project Cooperation Agreement (PCA) was executed and funds appropriated for construction. The Section 215 Agreement was executed January 5, 2000. The sponsor began acquiring homes in June 1999 and began demolition of the structures in February 2000. Negotiations began on the PCA, and continued through the fiscal year 2000.

25. LOWER RIO GRANDE BASIN, TX

Location. The project is located in Willacy, Hidalgo, and Cameron Counties. The basin is bounded on the east by the Gulf of Mexico, on the south by the Rio Grande which forms the international boundary between the United States and Mexico, on the west by Starr County, and on the north by Brooks and Kenedy Counties.

Existing project. See individual detailed reports on Arroyo Colorado, South Main Channel, and Raymondville Drain.

Local cooperation. See individual detailed reports on Arroyo Colorado, South Main Channel, and Raymondville Drain.

25A. ARROYO COLORADO, TX

Location. The project is located in Hidalgo and Cameron Counties, Texas.

Existing project. The authorized project will provide flood protection along Highway 83 and erosion protection for the banks of the Arroyo Colorado in the city of Harlingen. The project consists of a gated water control structure, 1.4 miles of channel improvements, and stone armoring of selected reaches in Harlingen. The estimated cost for new work is $5,851,000 Federal (Corps) and $1,951,000 non-Federal consisting of $1,848,000 cash and $103,000 for lands and relocations (October 1, 1993 base prices).

The project has reached a stalemate as the Local Sponsor, the Hidalgo County Drainage District #1, can not provide required guarantee to hold and save the Government free from all damages arising from the construction, operation, maintenance, repair and replacement for the project, nor are they able to operate and maintain the project when completed. The International Boundary and Water Commission has complete jurisdiction over the project as it is one of the elements of the Rio Grande Floodway System. The Commission is interested in the project but only if additional funds to do operations and maintenance are provided. Legislative approval will be required to alter the current status.

Local cooperation. Local Sponsor, the Hidalgo County Drainage District #1, is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide a cash contribution presently estimated at $1,848,000 and bear all costs of operation, maintenance, and replacement of flood control facilities.

Operations during fiscal year. None.

25B. SOUTH MAIN CHANNEL, TX

Location. The project is located in Hidalgo and Willacy Counties, Texas.

Existing project. The authorized project consists of channel improvements which will provide flood protection to the cities of McAllen, Edinburg, Edcouch, La Villa and Lyford, as well as the rural areas of Hidalgo and Willacy Counties north of U.S. Highway 83. The estimated cost for new work is $132,791,000 Federal (Corps) and $72,386,000 non-Federal consisting of $10,259,000 cash and $28,107,000 lands and $34,020,000 relocations (October 1, 2000 base prices).

Local cooperation. Local Sponsors for the project are Hidalgo County Drainage District #1 and Willacy County Drainage District #1. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide a cash contribution presently estimated at $10,259,000 and bear all costs of operation, maintenance, and replacement of flood control facilities.

Operations during fiscal year. New Work: See Section 37, PRE-CONSTRUCTION ENGINEERING AND DESIGN.

25C. RAYMONDVILLE DRAIN, TX

Location. The project is located in northern Hidalgo and Willacy Counties, Texas.

Existing project. The authorized project will provide a drainage outlet to the Laguna Madre for northern Hidalgo and Willacy Counties. The project consists of 43.8 miles of channel work, including enlargement of existing channels and construction of new channels, a 3.88-mile long levee, and diversion ditches along the west side of Raymondville. The estimated cost for new work is $60,822,000 Federal (Corps) and $20,274,000 non-Federal consisting of $6,374,000 cash and $6,142,000 lands and $7,758,000 relocations (October 1, 2000 base prices).

Local cooperation. Local Sponsor for the project is Hidalgo County Drainage District #1 and Willacy County Drainage District #1. Local Sponsor is required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads and other facilities, except for railroad bridges; provide a cash contribution presently estimated at $6,374,000 and bear all costs of operation, maintenance, and replacement of flood control facilities.

Operations during fiscal year. New Work: See Section 37, PRE-CONSTRUCTION ENGINEERING AND DESIGN.

26. SIMS BAYOU, TX

Location. The project is located in Harris County, in the southern portion of Houston, Texas.

Existing project. The authorized plan of improvement provides for enlargement and rectification, with appropriate erosion control measures, of 19.3 miles of Sims Bayou to provide 25-year flood protection; environmental measures and riparian habitat improvement along the entire alignment; and recreational development to include 27 miles of hike-and-bike trails connecting to existing public parks, together with picnic, playground, and other leisure facilities. Estimated cost for new work is $220,230,000 Federal (Corps) and $108,276,000 non-Federal consisting of $19,326,000 cash contributions,

$39,988,000 for lands, $48,660,000 for relocations and $302,000 for channels (October 1, 2000 base price).

Local cooperation. Local Sponsor for the project is Harris County Flood Control District. In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, local interests are required to provide lands, easements, and rights-of-way; modify or relocate buildings, pipelines, utilities, roads, and other facilities, except railroad bridges, where necessary for the construction of the project; pay one-half of the separable and joint costs allocated to recreation; and bear all costs of operation, maintenance and replacement of recreation facilities; and pay 5 percent of the costs allocated to flood control; and bear all costs of operation, maintenance and replacement of flood control facilities. The Local Cooperation Agreement for flood control was executed on October 19, 1990. The recreation Local Cooperation Agreement is pending.

Operations during fiscal year. New Work: Construction contract for channel rectification from Hemingway Drive to Reveille Park, awarded December 22, 1994, was physically completed January 1998, but remains financially open. The construction contract for channel rectification from Swallow to Hemingway, awarded July 19, 1996, was physically completed in January 1999, but is not financially complete. Surveys were performed by contract in connection with plans and specifications for the Cullen to State Highway 288 reach and the State Highway 288 to Union Pacific Railroad reach at a cost of $455,316. Construction contract for channel rectification from Swallow to Mykawa, awarded November 20, 1997, continued through FY 00 at a cost of $2,378,650. Construction contract for channel rectification from Mykawa to Cullen, awarded April 1, 1999, continued through FY 00 at a cost of $6,588,011. A contract to repair damages from Reveille Park to Hemingway, awarded April 19, 1999, continued through FY 00 at a cost of $1,205,787. A construction contract for Channel rectification at Mouth to Port Terminal Railroad, Station 9+00 to 52+52 was awarded June 30, 2000. No cost was incurred for FY 00.

Reimbursement was made to the Local Sponsor, Harris County Flood Control District, for their work on the reach from Port Terminal Railroad to Interstate Highway 45, in the amount of $300,000.

27. INSPECTION OF COMPLETED FLOOD CONTROL WORKS

Inspections of completed projects operated and maintained by local interests were made on the following projects. Fiscal year cost was $149,391.

Project	Date of Inspection
Brays Bayou, TX	December 1999
Buffalo Bayou at Piney Point, TX	April 2000
Port Arthur, Hurricane Flood Protection, TX	February 2000
State Highway 111 Bridge, TX	May 2000
Three Rivers, TX	May 2000
Clear Creek, TX - Second Outlet	April 2000
Galveston Groins, TX	August 2000

28. FLOOD CONTROL WORK UNDER SPECIAL AUTHORIZATION

Flood control activities pursuant to section 205 of 1970 Flood Control Act, Public Law 858, 80th Congress, as amended:

No initial coordination for Section 205 Flood Control activities were performed in FY 00. Construction of the flood protection project for Buffalo Bayou, Texas (Lynchburg Pump Station) is discussed in Section 22.

A feasibility report for flood protection at Pin Oak Creek at Kirbyville, Texas, initiated in FY 99, completed in FY 00 at a fiscal year cost of $6,541. The study was terminated in FY 00 at the request of the sponsor.

Emergency flood control – repair, flood fighting, and rescue work (Public Law 99, 84th Congress and antecedent legislation):

Disaster Preparedness cost for Fiscal Year 2000 was $315,081. Catastrophic Disaster Preparedness Program fiscal year cost was $55,154.

29. EMERGENCY STREAM RANK AND SHORELINE EROSION WORK AND SNAGGING AND CLEARING ACTIVITIES UNDER SPECIAL AUTHORIZATION

Stream bank and shoreline erosion activities pursuant to Section 14 of the 1946 Flood Control Act, Public Law 525, as amended:

No new studies for stream bank and shoreline erosion activities were performed in FY 00.

Snagging and clearing activities for flood control pursuant to Section 208 of the Flood Control Act of 1954, Public Law 780, as amended:

No new feasibility studies of snagging and clearing activities for flood control improvements were performed in Fiscal Year 2000.

Environmental Restoration

30. PROJECT MODIFICATIONS FOR IMPROVEMENT OF ENVIRONMENT

Project modifications for improvement of environment activities pursuant to Section 1135 of the Water Resources Development Act of 1986, Public Law 99-662, as amended:

No coordination or initial appraisals were performed in FY 00.

31. AQUATIC ECOSYSTEM RESTORATION

Coordination of Aquatic Ecosystem Restoration to improve the quality of the environment pursuant to section 206 of the Water Resources Development Act of 1996, Public Law 104-303, as amended:

Fiscal year costs for coordination were $6,824. No initial appraisals were performed in FY 00.

32. BENEFICIAL USES OF DREDGED MATERIAL

Projects for beneficial uses of dredged material pursuant to Section 204 of the Water Resources Development Act of 1992, Public Law 102-560 are as follows:

Planning and design analysis and environmental assessment for Sabine-Neches Waterway, Texas Point National Wildlife Refuge, TX, are discussed in Section 33.

33. SABINE-NECHES WATERWAY – TEXAS POINT NATIONAL WILDLIFE REFUGE, TX

Location. The project is located on the Texas Gulf Coast at the intersection of the Gulf shoreline and the West Jetty of the Sabine-Neches Waterway. The project is within the Texas Point National Wildlife Refuge, managed by the U.S. Fish and Wildlife Service in Jefferson County, Texas.

Existing project. The project consist of pumping dredged material from the maintenance dredging of the Sabine Pass Channel onto the beach ridges adjacent to the West Jetty and within the Texas Point National Wildlife Refuge. Material placed in the marsh will fill subsided and eroded areas and enhance the restoration of the marsh. The material would also be available for transport into the marshes by storm-driven tidal surges. Once the material is there it would increase marsh elevations and provide nutrients for marsh plants. Any additional material will be placed in the surf zone shoreward of the ridge. This material will further stabilize the ridge and will provide increased storm protection for the marsh.

By helping to mitigate the effects of subsidence and erosion, the restored wetlands will continue to provide feeding, nesting, and nursery habitat for a variety of waterfowl, water birds, and mammals that utilize the marshes. The protected marsh will continue to contribute to the productivity for fish and shellfish by providing a feeding and nursery area.

Estimated cost for new work is $871,134 Federal (Corps) and $290,378 non-Federal consisting of lands, easements, relocations and rights-of-way in the amount of $2,875 and a cash contribution of $287,503. The construction costs represent the incremental difference between the base navigation condition and the costs associated with constructing the marsh restoration project. There are no operation, maintenance, repair, rehabilitation, and replacement costs associated with the project.

Local cooperation. Fully complied with. The Texas General Land Office is the sponsor for the project. A Project Cooperation Agreement was executed August 11, 2000.

Operations during fiscal year. New Work: Initiated and completed the planning and design analysis and environmental assessment. A contract was awarded September 25, 2000, but no cost was incurred for Fiscal Year 2000.

General Investigations

34. SURVEYS

Fiscal year costs for reconnaissance and feasibility studies were $1,364,505 for navigation and $43,372 for flood damage prevention. Reconnaissance and feasibility studies on watershed and ecosystems projects incurred costs of $12,296. A cost of $39,523 was incurred for a reconnaissance study for shoreline protection in FY 00. Reconnaissance and feasibility studies on review of authorized projects incurred costs of $2,541,476 for FY 2000. Miscellaneous Activities for FY 00 include the following: Special Investigations at a cost of $25,361; Interagency Water Resources Development at $14,573; National Estuary Program at $5,834; and North American Waterfowl Management Plan at a cost of $2,208.

35. COORDINATION WITH OTHER AGENCIES

Cost for Coordination With Other Agencies was $5,087 for FY 2000.

36. COLLECTION AND STUDY OF BASIC DATA

Floodplain management, technical services and quick responses were performed at a cost of $50,002, $50,005, and $4,007, respectively.

Hydrologic studies cost $7,192.

37. PRE-CONSTRUCTION ENGINEERING AND DESIGN

Greens Bayou, Texas – The project will provide for 25 miles of stream enlargements, 14 miles of stream clearing and 4 flood detention basins. Aesthetic vegetation and mitigation is included. Recreation facilities include trails, picnic facilities, sports fields, launches, ramps, comfort stations and parking areas. Estimated planning and engineering cost is $6,945,000. Planning and engineering studies were initiated in FY 1990. Fiscal year costs were $696,154.

South Main Channel, Texas – The authorized project consists of channel improvements which will provide flood protection to the cities of McAllen, Edinburg, Edcouch, La Villa and Lyford, as well as the rural areas of Hidalgo and Willacy Counties north of U.S. Highway 83. The authorized plan is currently being revised to reflect a smaller project and will include construction of new channels only in Willacy County, and a local protection project for Lyford, Texas. Estimated planning and engineering estimate is $8,710,000. Planning and engineering studies were initiated in FY 1990. Fiscal year costs were $1,053,167.

Raymondville Drain, Texas - The project consist of 43.8 miles of channel work, including enlargement of existing channels, and construction of new channels, a 3.88-mile long levee, and diversion ditches along the west side of Raymondville, Texas. Estimated planning and engineering estimate is $2,343,000. Planning and engineering studies were initiated in FY 1997. Fiscal year costs were $113,158.

Hunting Bayou, Texas - The project was authorized for construction in the Water Resources Development Act of 1990 (PL 101-640). The authorized project provides for 14.3 miles of stream improvements, recreation trails, picnic facilities, a comfort station, access and parking areas. The Local Sponsor was authorized to design and construct an alternative to the project and be reimbursed for the Federal share by the Water Resources Development Act of 1996 (PL 104-303). The project is currently being reformulated and will be identified by the General Reevaluation Study. Estimated planning and engineering estimate is $2,070,000. Planning and engineering studies were initiated in FY 1998. Fiscal year costs were $74,635.

North Padre Island, Texas - The project was authorized for ecosystem restoration and storm damage reduction at North Padre Island, Corpus Christi Bay, by the Water Resources Development Act of 2000 (PL 106-53). The project will consist of a jettied channel from the Gulf of Mexico through Padre Island connecting with the Gulf Intracoastal Waterway at approximately mile 553; storm damage reduction measures on the north side of the area; and ecosystem restoration measures at various locations adjacent to the project area. Estimated planning and engineering estimate is $1,800,000. Planning and engineering studies were initiated in FY 2000. Fiscal year costs were $1,696,000.

TABLE 40-A

COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 97	FY 98	FY 99	FY 00	Total Cost To Sep. 30, 2000[29]
1.	**Aquatic Plant Control (Southwestern Division) 1965 Act**	**New Work:**					
		Approp.	–	31,000	–	–	4,533,600[1]
		Cost	6,319	4,784	2,259	9810	4,519,187[1]
2.	**Brazos Island Harbor, TX**	**New Work:**					
		Approp	–	–	(107,300)	–	27,871,202[2]
		Cost	27,305	21,221	(71,340)	–	27,871,202[2]
		Maint:					
		Approp	2,691,260	2,192,000	3,086,299	392,940	60,940,475[3]
		Cost	2,664,921	2,153,377	3,153,019	391,064	60,937,887[3]
		Major Rehab:					
		Approp.	–	–	–	–	2,170,080
		Cost	–	–	–	–	2,170,080
3.	**Cedar Bayou, TX**	**New Work:**					
		Approp.	–	–	–	–	681,263[4]
		Cost	–	–	–	–	681,263[4]
		Maint:					
		Approp.	(270)	–	603,430	159,600	4,224,576[5]
		Cost	8	–	603,358	159,604	4,224,500[5]
4.	**Channel to Port Bolivar, TX**	**New Work:**					
		Approp.	–	–	–	–	133,925[6]
		Cost	–	–	–	–	133,925[6]
		Maint:					
		Approp.	–	–	12,200	138,448	1,381,709[7]
		Cost	–	–	12,120	138,498	1,381,679[7]
5.	**Clear Creek and Clear Lake, TX**	**New Work:**					
		Approp.	–	–	–	–	66,934
		Cost	–	–	–	–	66,934
		Maint:					
		Approp.	–	–	12,400	(40)	549,599
		Cost	–	–	12,360	–	549,599
6.	**Corpus Christi Ship Channel, TX (Regular Funds)**	**New Work:**					
		Approp.	89,280	–	–	–	77,474,639[8]
		Cost	340,542	12,089	–	–	77,472,463[8]
		Maint:					
		Approp.	(3,957)	4,988,000	5,765,099	696,300	125,660,990[9]
		Cost	75,970	3,836,430	6,918,654	694,812	125,657,560[9]
		Major Rehab:					
		Approp.	–	–	–	–	3,576,684
		Cost	–	–	–	–	3,576,684
	(Contributed Funds)	**New Work:**					
		Contrib.	–	–	–	–	6,279,088
		Cost	149,887	–	–	–	6,143,152

TABLE 40-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 97	FY 98	FY 99	FY 00	Total Cost To Sep. 30, 2000[29]
7.	**Double Bayou, TX**	**New Work:**					
	(Regular Funds)	Approp.	–	–	–	–	226,558
		Cost	–	–	–	–	226,558
		Maint:					
		Approp.	433,050	–	15,774	–	1,860,902
		Cost	431,188	134	17,502	–	1,860,902
	(Contributed Funds)	**Maint:**					
		Contrib.	154,569	–	–	(23,569)	233,325
		Cost	131,000	–	–	–	233,325
8.	**Freeport Harbor, TX**	**New Work:**					
		Approp.	2,564,804	4,052,000	40,000	20,000	64,781,956[10]
		Cost	2,503,579	4,263,253	55,290	30,077	64,765,972[10]
		Maint:					
		Approp.	4,620,841	3,630,000	4,647,783	4,947,000	84,724,039
		Cost	4,587,072	2,342,847	5,970,636	4,946,198	84,722,380[11]
	Minor Rehab:						
		Approp.	–	–	–	–	8,935
		Cost	–	–	–	–	8,935
9.	**Galveston Harbor and Channel, TX**	**New Work:**					
		Approp.	–	–	–	–	29,096,392[12]
		Cost	–	–	–	–	29,096,392[12]
		Maint:					
		Approp.	4,263,430	4,333,000	166,376	6,697,753	118,749,047[13]
		Cost	4,246,903	4,319,309	194,590	6,698,589	118,746,515[13]
		Major Rehab:					
		Approp.	–	–	–	–	7,969,329
		Cost	–	–	–	–	7,969,329
10.	**Gulf Intracoastal Waterway between Apalachee Bay, FL and the Mexican Border (Galveston District) (Regular Funds)**	**New Work:**					
		Approp.	12,270,830	9,978,000	7,204,100	9,506,490	143,553,717[14]
		Cost	12,332,656	8,097,000	8,907,151	9,609,040	143,253,237[14]
	(Inland Waterways Trust Fund)	**New Work:**					
		Approp	8,558,000	2,941,000	–	(130,510)	28,634,490
		Cost	8,649,381	3,122,015	26,540	384	28,634,490
	(Regular Funds)	**Maint:**					
		Appr	24,577,401	27,841,900	28,308,062	28,670,518	489,681,327[15]
		Cost	24,582,562	26,035,524	30,264,184	28,634,639	489,581,472[16]
		Major Rehab:					
		Approp.	250,000	–	(40,300)	–	3,390,338
		Cost	415,369	8,781	(8,162)	–	3,390,338
	(Inland Waterways	**Major Rehab:**					
	Trust Fund)	Approp.	250,000	–	(40,300)	–	2,955,700
		Cost	467,140	9,338	(2,525)	–	2,955,700
	(Regular Funds)	**Minor Rehab:**					
		Approp.	–	–	–	–	835,873
		Cost	–	–	–	–	835,873

TABLE 40-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 97	FY 98	FY 99	FY 00	Total Cost To Sep. 30, 2000[29]
11.	Houston-Galveston Navigation Channels, TX (Regular Funds)	New Work:					
		Approp.	1,725,000	20,000,000	44,201,800	38,003,700	121,248,300
		Cost	1,654,890	2,753,710	32,002,467	67,341,990	121,054,644
	(Contributed Funds)	New Work:					
		Approp.	–	–	19,960,000	19,100,000	40,080,000
		Cost	540,853	234,666	9,651,362	26,939,013	37,586,330
12.	Houston Ship Channel, TX (Regular Funds)	New Work:					
		Approp.	–	–	–	–	35,760,382[17]
		Cost	–	–	–	–	35,760,382[1]
		Maint:					
		Approp.	6,742,478	13,273,600	6,237,105	8,543,922	198,964,433[18]
		Cost	6,739,949	12,579,485	6,943,371	8,535,868	198,953,768[18]
13.	Matagorda, Ship Channel, TX (Regular Funds)	New Work:					
		Approp.	–	–	–	–	18,058,777[19]
		Cost	–	–	–	–	18,058,777[19]
		Maint:					
		Approp.	1,406,029	2,757,000	2,563,618	1,409,404	66,713,029[20]
		Cost	1,400,113	2,030,483	3,298,461	1,395,380	66,696,728[20]
14.	Neches River Saltwater Barrier, TX (Regular Funds)	New Work:					
		Approp.	502,000	1,450,000	2,307,000	1,715,000	7,821,843
		Cost	481,833	1,455,003	2,322,312	1,452,433	7,558,974
	(Contributed Funds)	New Work:					
		Approp.	–	–	–	800,000	800,000
		Cost	–	–	–	195,260	195,260
15.	Sabine-Neches Waterway, TX (Regular Funds)	New Work:					
		Approp.	–	–	–	–	56,136,815[21]
		Cost	–	–	–	–	56,136,815[21]
		Maint:					
		Approp.	11,594,320	8,356,000	7,840,364	11,238,821	246,259,691[22]
		Cost	11,587,144	7,940,843	8,272,907	11,232,884	246,249,240[22]
16.	Texas City Channel, TX	New Work:					
		Approp.	25,000	–	–	–	15,156,972[23]
		Cost	24,922	78	–	–	15,156,972[23]
		Maint:					
		Approp.	(50,596)	420,000	3,274,501	42,050	32,861,666[24]
		Cost	(52,144)	244,100	3,452,538	42,040	32,861,656[24]
		Major Rehab:					
		Approp.	–	–	–	–	726,158
		Cost	–	–	–	–	726,158
17.	Trinity River and Tributaries, TX (Includes Wallisville)	New Work:					
		Approp.	12,000,000	9,200,000	5,500,000	3,989,000	80,612,676[25]
		Cost	11,989,713	8,902,679	4,730,564	4,789,998	80,042,813[25]
		Maint:					
		Approp.	739,714	880,000	928,558	2,473,000	25,505,886[26]
		Cost	665,091	772,311	1,135,125	2,470,717	25,500,569[26]

TABLE 40-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 97	FY 98	FY 99	FY 00	Total Cost To Sep. 30, 2000[29]
20.	Corpus Christi Beach, TX (Restoration Project)	New Work:					
		Approp.	–	–	–	–	2,120,641
		Cost	–	–	–	–	2,120,641
	(Contributed Funds)	New Work:					
		Approp.	–	–	(28,635)	–	2,009,710
		Cost	–	–	–	–	2,009,710
21.	Buffalo Bayou and Tributaries, TX	New Work:					
		Approp.	1,493,500	3,420,310	5,796,200	5,520,000	79,587,271[27]
		Cost	1,481,133	1,129,781	1,011,074	5,813,860	72,791,722[27]
		Recreation:					
		Approp.	–	–	–	–	377,804
		Cost	174	–	–	–	377,797
		Maint:					
		Approp.	2,835,440	5,115,500	2,007,741	1,985,927	45,257,223
		Cost	2,825,098	4,604,711	2,589,876	1,930,374	45,180,317
		Major Rehab:					
		Approp.	–	–	–	–	12,475,000
		Cost	–	–	–	–	12,475,000
		Dam Safety:					
		Approp.	–	–	–	–	12,693,700
		Cost	–	–	–	–	12,693,700
22.	Buffalo Bayou at Lynchburg, TX (Regular Funds)	New Work:					
		Approp.	165,000	262,800	32,000	–	758,600
		Cost	96,969	279,578	81,139	222	756,702
	(Contributed Funds)	New Work:					
		Approp.	–	–	–	–	273,346
		Cost	161	–	–	–	253,286
23.	Clear Creek, TX (Regular Funds)	New Work:					
		Approp.	5,463,502	1,004,000	290,873	788,300	22,976,036
		Cost	5,526,988	928,246	369,459	118,772	22,289,214
	(Contributed Funds)	New Work:					
		Approp.	275,000	–	–	–	1,315,000
		Cost	523,381	(-530)	82,935	–	1,234,382
24.	Cypress Creek, TX (Regular Funds)	New Work:					
		Approp.	155,000	220,000	85,000	3,832,000	6,127,100
		Cost	162,349	221,524	86,676	39,350	2,334,426
	(Contributed Funds)	New Work:					
		Approp.	170,000	–	–	–	835,000
		Cost	189,180	–	–	65	835,000
25.	Lower Rio Grande Basin, TX	New Work:					
		Approp.	962,000	850,600	740,800	1,192,000	8,206,463
		Cost	973,452	865,066	743,917	1,166,325	8,180,290
26.	Sims Bayou, TX (Regular Funds)	New Work:					
		Approp.	13,026,290	11,409,000	8,846,127	11,410,000	82,202,417
		Cost	12,855,241	9,552,099	9,504,001	12,294,414	81,666,287
	(Contributed Funds)	New Work:					
		Approp.	885,500	755,860	200,000	550,000	5,291,360[28]
		Cost	1,146,701	398,575	484,385	510,799	4,872,936[28]

TABLE 40-A COST AND FINANCIAL STATEMENT

See Section in Text	Project	Funding	FY 97	FY 98	FY 99	FY 00	Total Cost To Sep. 30, 2000[29]
33.	**SNWW- Texas Point Wildlife Refuge**	**New Work:**					
	(Regular Funds)	Approp.	_	_	_	875,000	875,000
		Cost.	–	–	–	121,970	121,970
	(Contributed Funds)	**New Work:**					
		Approp.	_	_	_	_	_
		Cost.	–	–	–	–	–

[1] Excludes $1,637,270 credit for contributed work.

[2] Includes $675,855 for previous projects. In addition, $10,571,509 expended from contributed funds, of which $123,361 was for previous projects. Excludes $874,258 expended from contributed funds for dock removal for the local sponsor.

[3] In addition, $1,352,092 expended from contributed funds and $34,000 expended from contributed funds for Port Isabel. In addition $621,723 expended from contributed funds from the City of South Padre Island for beneficial placement of dredged material on the South Padre Island Beach.

[4] Includes $39,087 for previous projects. In addition $25,000 expended from contributed funds.

[5] Includes $69,784 for previous projects.

[6] Includes $48,711 for previous projects.

[7] Includes $46,101 for previous projects.

[8] Includes $1,372,534 for previous projects. Includes $456,515 for Sec. 107 project for Port Aransas Breakwaters. In addition $768 expended from contributed funds for Port Aransas Breakwaters.

[9] Includes $62,452 for previous projects. In addition, $1,071,952 expended from contributed funds.

[10] Includes $147,098 for previous projects. In addition, $20,811,568 expended from contributed funds. ($581,615 on 45-foot project.)

[11] In addition, $229,311 expended from contributed funds.

[12] Includes $8,421,996 for previous projects. In addition, $3,648,932 expended from contributed funds.

[13] Includes $86,126 for previous projects. In addition, $2,982,425 expended from contributed funds.

[14] Includes $706,709 for previous projects. Includes Sec. 107 projects for Port Isabel Small Boat Basin ($46,559); Port Isabel Side Channel ($8,414); Offatts Bayou ($356,466); and Channel to Aransas Pass ($658,573). In addition contributed funds expended for Port Isabel Small Boat Basin ($46,559); Offatts Bayou ($49,665); Channel to Aransas Pass ($347,950); Chocolate Bayou ($658,310); Mouth of Colorado River ($3,397,080); ($1,275,097) Channel to Victoria; and ($862,716) expended for the local sponsor's levee requirement on Channel to Victoria.

[15] Includes $1,526,564 for previous projects. In addition $22,672 contributed funds for main channel and $336,450 contributed funds for Rollover Pass (beginning 1997). Includes following amounts for tributary channels separately funded starting in fiscal year 1987: Channel to Victoria $16,883,455. Channel to Aransas Pass $2,600. Chocolate Bayou Channel $4,181,780. Includes following amounts for tributary channels separately funded starting in fiscal year 1989: Channel to Harlingen $8,452,983. Channel to Port Mansfield $9,044,003. Also includes $13,861,117 for Mouth of Colorado River, separately funded beginning in fiscal year 1992 and $28,140 contributed funds for Channel to Harlingen beginning in fiscal year 1998.

[16] Includes $1,526,564 for previous projects. In addition $22,672 expended from contributed funds for main channel and $244,642 contributed funds for Rollover Pass (beginning 1997) for the beneficial placement of dredge material at Rollover Pass. Includes following amounts for tributary channels separately funded starting in fiscal year 1987: Channel to Victoria $16,882,704, Channel to Aransas Pass $2,600, Chocolate Bayou Channel $4,169,123. In addition $1,515,574 was expended from contributed funds for Chocolate Bayou Channel. Also includes amounts for tributary channels separately funded starting in fiscal year 1989: Channel to Harlingen $8,449,348. Channel to Port Mansfield $9,039,335. Also includes an expended amount of $13,860,409 for Mouth of Colorado River, separately funded in fiscal year 1992. In addition, includes $28,140 contributed funds expended beginning in fiscal year 1998.

[17] Includes $4,105,157 for previous projects. In addition, $2,591,939 expended from contributed funds, of which $1,209,179 was for previous projects.

[18] Includes $1,213,142 for previous projects. In addition, $534,641 expended from contributed funds for Houston Ship Channel, of which $200,000 was for previous projects and $125,000 expended from contributed funds for Greens Bayou Channel. Includes appropriated funds for tributary channels separately funded starting in fiscal year 1992: Greens Bayou Channel $640,178. Barbour Terminal Channel $2,122,991. Bayport Ship Channel $10,400,665. Also, includes $91,942 contributed funds for Bayport Ship Channel beginning in FY 1998. Expenditures for tributary channels separately funded starting in fiscal year 1992: Greens Bayou Channel $637,217. Barbour Terminal Channel $2,121,705. Bayport Ship Channel $10,399,931. In addition $91,942 expended from contributed funds for Bayport Ship Channel beginning in FY 1998.

[19] In addition, $12,259,619 expended from contributed funds and $182,800 for contributed lands.

[20] Starting in fiscal year 1990 includes an appropriation of $2,334,990 and expenditures of $2,334,990 for Channel to Red Bluff.

[21] Includes $5,180,832 for previous projects. In addition, $2,680,942 expended from contributed funds, of which $577,507 was for previous projects.

[22] Includes $2,379,677 for previous projects. In addition, $5,938,115 expended from contributed funds and $7,944 expended from contributed funds for real estate acquisition for the local sponsor.

[23] Includes $366,823 for previous projects. In addition, $1,023,819 expended from contributed funds, of which $99,000 was for mitigation measures.

[24] Includes $195,083 for previous projects.

[25] Includes $1,966,306 for previous projects. In addition, $66,000 expended from contributed funds.

[26] Includes $543,662 for previous projects. Includes $6,719,813 appropriated (and $6,717,175 expended) for Wallisville Lake project beginning in FY 1983.

[27] Includes $4,400,000 of advanced funds repaid to Harris County Flood Control District. In addition, $63,661 contributed funds expended for Brays Bayou and $12,900 Federal funds and $19,104 contributed funds expended for enlargement of Clodine Ditch.

[28] Excludes $2,001,295 expended from contributed funds for real estate acquisition for the local sponsor.

[29] Includes funds ($12,544,400) provided by the Jobs Act (P.L. 98-8, dated March 24, 1983) for projects listed in Table 15-I of Annual Report for 1985.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
1.		**AQUATIC PLANT CONTROL, TX**	
	Oct. 27, 1965	Provides for control of progressive eradication of aquatic plant growth from the navigable waters and streams in the U.S.	H. Doc. 251, 89th Cong., 1st Sess.
	Nov. 17, 1986	Amended cost sharing requirements to provide for 50 percent Federal and 50 percent non-Federal participation in control operations.	Sec. 103(c), PL 99-662
2.		**BRAZOS ISLAND HARBOR, TX**	
	Jun. 3, 1930	Jetties and jetty channel, inside channels and basins.	Rivers and Harbors Committee Doc. 16, 71st Cong., 2nd Sess.
	May 24, 1934 (PWA) Aug. 30, 1935	Local cooperation requirement modified to provide contribution of funds to cover cost of original dredging of all inside channels and basins.	Rivers and Harbors Committee Doc. 10, 71st Cong., 1st Sess.
	Aug. 26, 1937	Deepen jetty channel to 31 feet and inner channels and Brownsville and Port Isabel turning basins to 28 feet.	Rivers and Harbors Committee Doc. 32, 75th Cong., 1st Sess.
	Mar. 2, 1945	Enlarge Port Isabel turning basin.	H. Doc. 335, 76th Cong., 1st Sess.
	Mar. 2, 1945	Deepen entrance channel to 35 feet; deepen to 33 feet channel across Laguna Madre; deepen to 32 feet channels from Laguna Madre to turning basins at Brownsville and Port Isabel; widen turning basins; and dredging present shallow-draft channel south of Port Isabel from railroad bridge to Laguna Madre and connecting channel to Port Isabel turning basin.	H. Doc. 347, 77th Cong., 1st Sess.
	Jul. 24, 1946	Additional connecting channel between Port Isabel and Brownsville channels; and transfer shallow-draft channels at Port Isabel to GIWW.	H. Doc. 627, 79th Cong., 2nd Sess.
	May 17, 1950	Deepen to 38 feet in outer bar channels and 36 feet in all other authorized channels and basins; extend existing turning basins at Brownsville and Port Isabel; and construct small-boat basin with a connecting channel next to Brownsville ship channel.	H. Doc. 192, 81st Cong., 1st Sess.
	Jul. 14, 1960	Widen Brownsville Channel to 300 feet at a depth of 36 feet from former Goose Island passing basin to turning basin extension, thence at a width of 500 feet and same depth to turning basin proper, deepen to 36 feet in area in southeast corner of turning basin, maintain two existing basins of fishing harbor, and a connecting channel, and construct a third basin, with necessary connecting channel and extend Brazos Island Harbor north jetty seaward 1,000 feet.[27]	H. Doc. 428, 86th Cong., 2nd Sess.[1]
	Nov. 17, 1986	Enlargement of the entrance channel from deep water in the Gulf of Mexico to the Laguna Madre to a depth of 44 feet and a width of 400 feet; enlargement of the Turning Basin Extension to a point 800 feet beyond the grain elevator to a depth of 42 feet at widths varying from 325 to 400 feet; removal of Brownsville Navigation District Wharves 5, 6, and 9 to permit widening of the adjacent portion of the Turning Basin to 1,200 feet at a depth of 36 feet; construction of asphalt walkways with handrails on the crown of the North and South Jetties, and construction of park-type public use facilities at the inner end of the North Jetty.	Sec. 201, PL 99-662

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
3.		**CEDAR BAYOU, TX**	
	Jul. 3, 1930	Channel 10 feet deep and 100 feet wide from Houston Ship Channel to a point on bayou 11 miles above mouth.[29]	S. Doc 107, 71st Cong., 2nd Sess.[1]
	Dec. 11, 2000	Channel 12 feet deep and 125 feet wide from Houston Ship channel to a point on bayou 11 miles above mouth.	S. 349 (a)(2), PL 106-541
4.		**CHANNEL TO PORT BOLIVAR, TX**	
	Jun. 25, 1910	A channel 30 feet deep and 200 feet wide from deep water in Galveston Harbor extending to a turning basin 1,000 feet square and 30 feet deep.[30]	H. Doc. 328, 61st Cong., 2nd Sess.
	Mar. 4, 1919	Enlargement, extension and protection of turning basin.[30]	H. Doc. 1122, 65th Cong., 2nd Sess.[1]
5.		**CLEAR CREEK AND CLEAR LAKE, TX**	
	Jun. 13, 1902	A channel 4 feet deep and 50 feet wide.	H. Doc. 449, 56th Cong., 1st Sess.
	Aug. 30, 1935	Enlargement of channel to 6 feet deep and 60 feet wide.	H. Doc. 264, 73rd Cong., 2nd Sess.
	Mar. 2, 1945	Realignment, enlargement, and extension of channel to highway bridge near League City.	H. Doc. 319, 77th Cong., 1st Sess.[1]
6.		**CORPUS CHRISTI SHIP CHANNEL, TX**	
	Mar. 3, 1899	Acquisition of old curved portion of north jetty previously constructed by private parties.	Specified in Act.
	Jun. 13, 1902	Complete north jetty in accordance with builder's plans.	Specified in Act.
	Mar. 3, 1905	Complete north jetty in accordance with builder's plans.	Specified in Act.
	Mar. 2, 1907	Connect old curve to St. Joseph Island, and construct south jetty.	Rivers and Harbors Committee Doc. 5, 59th Cong., 2nd Sess.
	Feb. 27, 1911	Dredge roadstead in Harbor Island Basin to 20 feet deep and construct 10,000 linear feet of stone dike on St. Joseph Island.	H. Doc. 1094, 61st Cong., 3rd Sess.
	Mar. 4, 1913[2]	Channel between jetties and Harbor Island Basin to 25 feet deep, extend jetties seaward, extend dike on St. Joseph Island 9,100 feet, and dredge approach channel 12 feet deep to town of Port Aransas.	H. Doc. 1125, 62nd Cong., 3rd Sess.
	Sep. 23, 1922	Dredging channel from Aransas Pass to Corpus Christi, 25 feet deep, 200 feet bottom width.	H. Doc. 321, 67th Cong., 2nd Sess.
	Jul. 3, 1930[3]	Deepen entrance channel from gulf to Harbor Island and provide an inner basin at Harbor Island of reduced area but greater depth.	H. Doc. 214, 70th Cong., 1st Sess.
	Jul. 3, 1930	Channel from Aransas Pass to Corpus Christi Channel with depth 30 feet.	Rivers and Harbors Committee Doc. 9, 71st Cong., 1st Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		CORPUS CHRISTI SHIP CHANNEL, TX (Continued)	
	Aug. 30, 1935[4]	Enlarge all channels from gulf to western end of basin dredge by Humble Oil and Refining Co., at its docks on Harbor Island.	Committee Docs. 35, 72nd Cong., 1st Sess., and 40, 73rd Cong., 2nd Sess.
	Aug. 30, 1935	Maintain channel and maneuvering basin between breakwater and western shoreline of Corpus Christi Bay.	H. Doc. 130, 72nd Cong., 1st Sess.
	Aug. 30, 1935	Maintain 30-foot depth of approach channel, turning basin at Corpus Christi, Industrial Canal and turning basin at Avery Point.	Rivers and Harbors Committee Doc. 13, 74th Cong., 1st Sess.
	Aug 30, 1935	Maintain and deepen to 32 feet channel from deep water at Port Aransas to and including turning basin at Corpus Christi.	Rivers and Harbors Committee Doc. 63, 74th Cong., 1st Sess.
	Jun. 20, 1938	Extend main turning basin at Corpus Christi westward 2,500 feet at its present width and depth, deepen existing Industrial Canal and turning basin to 32 feet and extend this canal at a depth of 32 feet and general width of 150 feet, westward along Nueces Bay shore to a turning basin 32 feet by 900 feet, and 1,000 feet long near Tule Lake.	H. Doc. 574, 75th Cong., 3rd Sess.
	Mar. 2, 1945	Provide depth of 34 feet in all project channels and basins from Port Aransas to and including Tule Lake turning basin, for a width of 250 feet from Port Aransas to breakwater at Corpus Christi, for a width of 200 feet in Industrial Canal and in channel between Avery Point and Tule Lake turning basins, and widen Avery Point turning basin to 1,000 feet.	H. Doc. 544, 78th Cong., 2nd Sess.
	Jun. 30, 1948	Deepen entrance channel to 38 feet from gulf to outer end of jetty; 38 feet decreasing to 36 feet thence to station 90 north jetty; and 36 feet in all other deep water channels and basins except 2,000-foot undredged part of inner basin at Harbor Island, and a width of 400 feet in channel from Port Aransas to Maneuvering basin at Corpus Christi.	H. Doc. 560, 80th Cong., 2nd Sess.
	Sep. 3, 1954	An anchorage basin 12 feet deep, from 300 to 400 feet wide, and 900 feet long in Turtle Cove at Port Aransas, Texas.	H. Doc. 654, 81st Cong., 1st Sess.
	Sep. 3, 1954[5]	Branch channel 32 feet by 150 feet, extending northerly from main channel in vicinity of Port Ingleside, along north shore of Corpus Christi Bay to Reynolds Metals Co. plant and turning basin 32 feet deep and 800 feet square near plant in general vicinity of LaQuinta, Texas.	H. Doc. 89, 83rd Cong., 1st Sess.
	Sep. 3, 1954	An entrance channel 36 by 400 feet on a tangent alignment from 400-foot channel in Corpus Christi Bay, near Corpus Christi breakwater to flared approach channel to Corpus Christi turning basin.	H. Doc. 487, 83rd Cong., 2nd Sess.
	Jul. 3, 1958	Deepen and widen LaQuinta Channel to 36 by 200 feet; enlarge LaQuinta turning basin to 36 by 800 by 1,000 feet; a flared entrance to channel; and widening at curves.	S. Doc. 33, 85th Cong., 1st Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		CORPUS CHRISTI SHIP CHANNEL, TX (Continued)	
	Jul. 3, 1958	Deepen entrance channel to 42 feet from gulf to outer end of jetty; 40 feet in all other deep-water channels and basins except undredged northward extension to inner basin at Harbor Island and branch channel to LaQuinta; and widen Industrial Channel to 400 feet with flared entrances to Corpus Christi and Avery Point turning basins.	H. Doc. 361, 85th Cong., 2nd Sess.
	Jul. 3, 1958	Channel 40 by 200 feet extending 2.2 miles from Tule Lake turning basin to a turning basin 40 feet deep, 700 to 900 feet wide, 1,000 feet long at Viola, Texas.	H. Doc. 361, 85th Cong., 2nd Sess.
	Jul. 3, 1958	Depth of 12 feet and a width of 100 feet in locally dredged Jewel Fulton Canal from LaQuinta Channel to a turning basin 12 by 200 by 400 feet, and assumption of maintenance by United States.	H. Doc. 361, 85th Cong., 2nd Sess.
	Jul. 14, 1960 (As amended by Dec. 31, 1970)	Construction of a breakwater at entrance to harbor area at Port Aransas, and realignment of existing 12-foot by 100-foot project channel.	Sec. 107, PL-86-645
	Aug. 13, 1968	Provides for a project depth of 45 feet in the existing deep-draft channels and basins, for construction of a new deep-draft turning point, for construction of a deep draft mooring area and mooring facilities and for widening of the channels and basins at certain locations. The Act also deauthorized the undredged northward extension of Inner Basin at Harbor Island and the undredged west turnout (Wye connection) between the LaQuinta Channel and the main channel of the waterway.	S. Doc. 99, 90th Cong., 2nd Sess.[1]
	Oct. 22, 1976	Modified local cooperation requirements for 1968 Act. Shifted responsibility for cost of disposal areas and confinement works from sponsor to joint 75 percent Federal and 25 percent non-Federal responsibility.	Sec. 124, PL 94-587
	Sep. 15, 1994	Assume maintenance of 17 foot by 100 foot Jewel Fulton Canal, after construction by local interest.	Sec. 204, PL 99-662 as amended
7.		**DOUBLE BAYOU, TX.**	
	Mar. 3, 1899	A channel 6-feet deep and 100-feet wide through the bar at mouth of Double Bayou.	H. Doc. 387, 55th Cong., 2nd Sess.
	Jul. 14, 1960 (As amended Oct. 25, 1965)	**7**-foot by 125-foot channel from the 7-foot depth in Trinity Bay to the intersection of Double Bayou Channel with the channel to Liberty; and thence a 7- by 100-foot channel upstream for 2.0 miles.	Sec. 107, PL 86-646
8.		**FREEPORT HARBOR, TX**	
	Mar. 3, 1899	Dredging and other work necessary in judgment of Secretary of War for improving harbor; for taking over jetties and privately built works at mouth of river.	Specified in Act.
	Mar. 2, 1907	Examination authorized. Work later confined to maintenance of jetties.	H. Doc. 1087, 60th Cong., 2nd Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		FREEPORT HARBOR, TX (continued)	
	Feb. 27, 1911	Repairs to jetties and dredging.	Specified in Act.
	Mar. 4, 1913	Construct seagoing hopper dredge.	Specified in Act.
	Aug. 8, 1917	Purchase of one 15-inch pipeline dredge and equipment, its operation of 3 years, operation of seagoing dredge one-half time for 3 years, and repairs to jetties.	Specified in Act.
	Mar. 3, 1925[6]	Diversion dam, diversion channel, and necessary auxiliary works.	Rivers and Harbors Committee Doc. 10, 68th Cong., 2nd Sess.
	Jul. 3, 1930	Maintenance of diversion channel at expense of local interest.	Rivers and Harbors Committee Doc. 18, 70th Cong., 1st Sess.
	Aug. 30, 1935	Deepening channels and basins.	Rivers and Harbors Committee Doc. 15, 72nd Cong., 1st Sess.
	Aug. 30, 1935	Maintenance of present project dimensions of channels and basins at Federal expense.	Rivers and Harbors Committee Docs. 15, 72nd Cong., 1st Sess., and 29, 73rd Cong., 2nd Sess.
	May 17, 1950	Deepen outer bar channel to 38 feet from gulf to a point within jetties, thence 36 feet in authorized channels to and including upper turning basin.	H. Doc. 195, 81st Cong., 1st Sess.
	Jul. 3, 1958	Relocate outer bar channel on straight alignment with jetty channel and maintain Brazos Harbor entrance channel and turning basin (constructed by local interests).	H. Doc. 433, 84th Cong., 2nd Sess.
	Oct. 5, 1961	Modification of HD 1469. Revoking certain provisions of local cooperation.	PL 394, 87th Cong.
	Dec. 31, 1970	Relocation of entrance channel and deepen to 47 feet; enlargement to a depth of 45 feet and relocation of jetty channel and inside main channel; deepening to 45 feet of channel to Brazosport; enlargement of the widened area of Quintana Point to provide a depth of 45 feet with a 750-foot diameter turning area; Brazosport turning basin to 45 feet deep with a 1,000 foot turning area; a new turning basin with a 1,200 foot diameter turning area and 45 feet deep; deepening Brazosport channel to 36 by 750 feet diameter; flared approaches from Brazos Harbor Channel; relocation of north jetty and rehabilitation of south jetty.	H. Doc. 289, 93rd Cong., 2nd Sess.[2]
	Nov. 17, 1986	Modified local cooperation requirements for the 1970 Act.	Sec. 101, PL 99-662

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
9.		**GALVESTON HARBOR AND CHANNEL, TX**	
	Aug. 5, 1886	Construct 2 rubblestone jetties at entrance to Galveston Harbor.	H. Doc. 85, 49th Cong., 1st Sess., and Annual Report, 1886, p. 1311.
	Jun. 13, 1902	A channel 1,200 by 30 feet from Bolivar Roads (outer end of old inner bar near Fort Point) at 51st Street.[8]	H. Doc. 264, 56th Cong., 2nd Sess.
	Mar. 3, 1905	Purchase or construct hydraulic pipeline dredge.	Specified in Act.
	Mar. 2, 1907	Extension of jetties to present project length and construction and operation of a dredge.	H. Doc. 340, 59th Cong., 2nd Sess., and Rivers and Harbors Committee Doc. 11, 59th Cong., 2nd Sess.
	Mar. 2, 1907[9]	Extension of Galveston Channel from 51st to 57th Sts., with depth of 30 feet and width of 700 feet.	H. Doc. 768, 59th Cong., 2nd Sess.
	Jun. 25, 1910[9]	Conditional extension of Galveston Channel between 51st and 57th Sts., 30 feet deep and 1,000 feet wide.	H. Doc. 328, 61st Cong., 2nd Sess
	Jul. 27, 1916	Extend seawall at Galveston from angle at 6th St., and Broadway to vicinity of Fort San Jacinto.	H. Doc. 1390, 62nd Cong., 3rd Sess.
	Jul. 18, 1918	Deepen harbor channel to 35 feet and widen to 800 feet.	H. Doc 758, 65th Cong., 2nd Sess.
	Sep. 22, 1922	Further extension of seawall at Galveston to a junction with south jetty; and repairing seawall in front of Fort Crockett reservation.	H. Doc. 693, 66th Cong., 2nd Sess.
	Jan. 21, 1927[11]	Deepen Galveston Channel to 32 feet; and maintain Galveston Harbor channels to dimensions of 800 feet wide, 35 feet deep on outer bar and 34 feet deep in inner bar.[10]	H. Doc. 307, 69th Cong., 1st Sess.
	Aug. 30, 1935	Maintain State Highway Ferry Landing Channels to dimensions of 12 by 100 feet.	River and Harbors Committee Doc. 31, 72nd Cong., 1st Sess.
	Aug. 30, 1935	Construct 13 groins along gulf shore from 12th to 61st Sts. in city of Galveston at a limited cost of $234,000 (10 groins constructed).	H. Doc. 400, 73rd Cong., 2nd Sess.
	Aug. 30, 1935	Deepen Galveston Channel to 34 feet (Bolivar Roads to 43rd St.).	Rivers and Harbors Committee Doc. 61, 74th Cong., 1st Sess.
	Aug. 30, 1935	Deepen Galveston entrance channel to 36 feet.	Rivers and Harbors Committee Doc. 57, 74th Cong., 1st Sess.
	Apr. 4, 1938	Completion of project for construction of 13 groins.	PL 463, 75th Cong.
	Jun. 30, 1948	Deepen Galveston Harbor to 38 feet from gulf to a point 2 miles west of seaward end of north jetty; thence 36 feet to Bolivar Roads; revoking authority for maintenance of ferry channels; and Galveston channel to 36 feet deep from Bolivar Roads to 43rd Street.	H. Doc. 561, 80th Cong., 2nd Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		GALVESTON HARBOR AND CHANNEL, TX (continued)	
	May 17, 1950	Deepen outer bar channel to 38 feet from gulf to a point within jetties, thence 36 feet in authorized channels to and including upper turning basin.	H. Doc. 195, 81st Cong., 1st Sess.
	Jul. 3, 1958	Dredge to a depth of 42 feet over the authorized width of 800 feet from the Gulf of Mexico to a point 2 miles west of the seawall and of the North jetty thence at a depth of 40 feet to the junction of the Houston Ship Channel, with widths of 800 feet to Bolivar Roads, thence decreasing to 400 feet at the junction with the Houston Ship Channel.	H. Doc. 350, 85th Cong., 2nd Sess.
	Jun. 23, 1971 (House Res.) Nov. 18, 1971 (Senate Res.)	Deepen Galveston Channel to 40 feet from Bolivar to 43rd Street.	H. Doc. 121, 92nd Cong
	Oct. 12, 1996	Provides for navigation and environmental restoration improvements. The navigation improvements consist of deepening and widening the Entrance Channel to 47 feet deep and 800 feet wide; the Houston Ship Channel to 45 feet deep and 530 feet wide; and the Galveston Channel to 45 feet deep. The environmental restoration portion consist of initial construction of marsh habitat and a colonial water bird nesting island through the beneficial use of new work dredged material, and incremental development (deferred construction) of additional marsh over the life of the navigation project through the beneficial use of maintenance materials dredged from Galveston Bay. The project is referred to as Houston-Galveston Navigation Channels.	Sec. 101 (30) PL 104-303
10.		**GULF INTRACOASTAL WATERWAY BETWEEN APALACHEE BAY, FL AND MEXICAN BORDER**	
	Mar. 2, 1907	Channel 4 by 100 feet from West Galveston Bay across Chocolate Bay to 4 feet of water in Chocolate Bay.	H. Doc. 445, 56th Cong., 1st Sess.
	Mar. 3, 1925	Channel 9 by 100 feet, Sabine River to Galveston Bay, and a 20-inch pipeline dredge. Such passing places, widening at bends, locks or guard locks and railway bridges over artificial cuts as are necessary.	H. Doc. 238, 68th Cong., 1st Sess.
	Jan. 21, 1927	Channel 9 by 100 feet, Galveston Bay to Corpus Christi.	H. Doc. 238, 68th Cong., 1st Sess.
	Aug. 26, 1937	Maintenance of a flood-discharge channel in Colorado River.	S. Committee print, 75th Cong., 1st Sess.
	Jun. 20, 1938[13]	Channel 9 by 100 feet in San Bernard River, Texas.	H. Doc. 640, 75th Cong., 3rd Sess.
	Jun. 20, 1938	Channel in Colorado River, 9 by 100 feet, with basin.	H. Doc. 642, 75th Cong., 3rd Sess.
	Jun. 20, 1938	Channel 9 by 100 feet from Palacios through Trepalacios and Matagorda Bays.	H. Doc. 564, 75th Cong., 3rd Sess.
	Jun. 20, 1938	Channel 9 by 200 feet from main channel to harbor at Rockport and improve harbor to 9-foot depth.	H. Doc. 641, 75th Cong., 3rd Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		GULF INTRACOASTAL WATERWAY (continued)	
	Jun. 20, 1938	Channel 6 by 100 feet from main channel to Aransas Pass, Texas.	H. Doc. 643, 75th Cong., 3rd Sess.
	Mar. 23, 1939	Enlarge waterway to depth of 12 feet and a width of 125 feet from Sabine River to Corpus Christi.	H. Doc. 230, 76th Cong., 1st Sess.
	Jul. 23, 1942	Construct waterway from Corpus Christi to vicinity of Mexican border to provide a depth of 12 feet and width of 125 feet throughout.	PL 675, 77th Cong.
	Mar. 2, 1945	Channel 6 by 60 feet from GIWW to a point in Chocolate Bayou near Liverpool.	H. Doc. 337, 76th Cong., 1st Sess.
	Mar. 2, 1945[9]	Channel 6 feet deep and 60 feet wide from main channel near Port O'Connor, Texas, in Barroom Bay.	H. Doc. 428, 76th Cong., 1st Sess.
	Mar. 2, 1945	Enlarge channel from main channel to Aransas Pass, Texas, providing a depth of 9 feet and width of 100 feet.	H. Doc. 383, 77th Cong., 1st Sess.
	Mar. 2, 1945	Channel 12 by 125 feet from main channel to Red Fish Landing, Texas, with basin.	S. Doc 248, 78th Cong., 2nd Sess.
	Mar. 2, 1945[14]	Channel 12 feet deep and 125 feet wide from main channel to vicinity of Harlingen, Texas, via Arroyo Colorado with basin.	H. Doc. 402, 77th Cong., 1st Sess. (See PL 14, 79th Cong.)
	Jul. 24, 1946	Fill a portion of shallow-draft channel adjacent to Port Isabel Turning Basin, construct a channel to connect shallow-draft channel with main channel near shoreline of Laguna Madre, and enlarge shallow-draft channel west of this connection, all to 12-foot depth and bottom width of 125 feet.	H. Doc. 627, 79th Cong., 2nd Sess.
	Jul. 24, 1946	Reroute main channel to north shore of Red Fish Bay between Aransas Bay and Corpus Christi Bay; deepen tributary channel from Port Aransas to Aransas Pass, Texas, 12 feet and extended basin at same depth.	H. Doc. 700, 79th Cong., 2nd Sess.
	May 17, 1950	Deauthorized 6 by 60 foot channel in Chocolate Bayou and reauthorized the 4 by 100-foot channel.	H. Doc. 768, 80th Cong., 2nd Sess.
	May 17, 1950	Alternate channel across South Galveston Bay between Port Bolivar and Galveston causeway.	H. Doc. 196, 81st Cong., 1st Sess.
	May 17, 1950	"Red Fish Landing" changed to "Port Mansfield, Texas."	PL 516, 81st Cong.
	Jul. 12, 1952	Incorporate as part of Intracoastal Waterway a channel 9 by 100 feet from main channel via Seadrift to point on Guadalupe River 3 miles above Victoria, Texas, authorized by River and Harbor Act of 1945.	PL 527, 82nd Cong., 2nd Sess.
	Sep. 3, 1954[15]	Small craft harbor 9 by 200 by 1,000 feet at Seadrift with an entrance channel 9 by 100 feet.	H. Doc. 478, 81st Cong., 2nd Sess.
	Sep. 3, 1954	Widen tributary channel between Port Aransas and Aransas Pass, Texas, to 125 feet; straighten and widen to 125 feet connecting channel to Conn Brown Harbor, and maintain Conn Brown Harbor at Federal expense, all to 12 feet deep.	H. Doc. 376, 83rd Cong., 2nd Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		GULF INTRACOASTAL WATERWAY (continued)	
	Sep. 9, 1959	Improve channels and basins comprising channel to Port Mansfield constructed in part by Federal Government and in part by local interest; constructing turnout curves at Gulf Intracoastal Waterway intersection and bend easing at entrance to turning basin; construct parallel jetties at gulf entrance; maintenance of locally dredged jetty channel 16 by 250 feet; and maintenance of small craft basin.	S. Doc. 11, 86th Cong., 1st Sess.
	Jul. 14, 1960	Entrance channel 7 feet deep by 75 feet wide from main channel to Gulf of Mexico to inside shoreline at Port Isabel, Texas, an inner channel 6 feet deep by 50 feet wide from entrance channel to East Harbor Basin, and an irregular-shaped harbor basin 6 feet deep having a surface area of about 7 acres.	Sec. 107, PL 645, 86th Cong.
	Jul. 14, 1960 (As amended Dec. 31, 1970)	Deepen the existing 6-foot channel at Port Isabel to 12 feet and removing the submerged bars at each end of the island to a depth of -12 feet MLT.	Sec. 107, PL 86-645
	Jul. 14, 1960 (As amended Dec. 31, 1970)	Deepening the existing channel to 12 by 125 feet, and extend southeasterly from the Gulf Intracoastal Waterway main channel in West Galveston Bay, into Offatts Bayou, a distance of 2.2 miles, and a west turnout 12 by 125 feet between the proposed Offatts Bayou Channel and the Gulf Intracoastal Waterway.	Sec. 107, PL 86-645
	Jul. 14, 1960 (As amended Dec. 31, 1970)	Deepening Aransas Pass tributary channel to 14 feet from mile 0 at Harbor Island to mile 6.1 at the city of Aransas Pass; widening to 175 feet between miles 3.5 and 4.6; and deepening Conn Brown Harbor, turning basin and connecting channel between Conn Brown Harbor and turning basin.	Sec. 107, PL 86-645
	Oct. 23, 1962[16]	Improve main channel 16 feet deep and 150 feet wide from Sabine River to Houston Ship Channel; with two relocations; relocate main channel in Matagorda Bay and Corpus Christi Bay; and maintaining existing Lydia Ann Channel.	H. Doc. 556, 87th Cong., 2nd Sess.
	Oct. 23, 1962	Deepen and widen channel to Palacios; construct two protective breakwaters; maintain and deepen existing basins; and deepen, enlarge and maintain existing approach channel to basin No. 2.	H. Doc. 504, 87th Cong., 2nd Sess.
	Oct. 23, 1962	Eliminates requirement of local interest to construct bridge at mile 29.2 turning basin at Victoria, and maintain turning basins at Victoria and Seadrift; provide: Federal construction of vertical-lift railroad bridge at Missouri-Pacific Railroad mainline crossing, mile 29.2; construction and future maintenance of basin near Victoria, Texas, and maintenance of basin constructed by local interests at Seadrift, Texas.	H. Doc. 288, 87th Cong., 2nd Sess.
	Oct. 27, 1965[17]	Modify existing Federal navigation project to provide a channel extending from Gulf Intracoastal Waterway through Chocolate Bay and Chocolate Bayou to project channel mile 8.2, thence to a turning basin near channel mile 13.2 and for salt water barrier in Chocolate Bayou about 3.7 miles upstream from basin (channel mile 16.9).	H. Doc. 217, 89th Cong., 1st Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		GULF INTRACOASTAL WATERWAY (continued)	
	Aug. 13, 1968	Entrance channel 15 feet deep and 200 feet wide at the mouth of Colorado River Channel protected by an east jetty 3,500 feet long extending to 12-foot depth and a west jetty 2,900 feet long extending to 5-foot contour; make channel 12 feet by 100 feet from gulf shore to Matagorda, including recreation facility, a turning basin 12 feet by 300 feet wide and 1,450 feet long, and a new diversion channel 250 feet wide and varying in depth from 20 to 23 feet including a closure dam across the present river channel.	S. Doc. 102, 90th Cong., 2nd Sess.
	Nov. 17, 1986	Modified 1968 authorization to provide that diversion features be constructed at Federal expense and operation and maintenance be shared 75 percent Federal and 25 percent non-Federal.	Sec. 812, PL 99-662
	Nov. 17, 1988	Enlarge existing Channel to Victoria from a depth of 9 feet and width of 100 feet to a depth of 12 feet and width of 125 feet.	Sec. 3, PL 100-676
	Oct. 31, 1992	Provide 8 miles of erosion protection for the existing waterway in the vicinity of Sargent, Texas.	Sec. 101 (20), PL 102-580
	Oct. 12, 1996	Provides for erosion protection along a 31-mile reach of the Gulf Intracoastal Waterway, which crosses the critical wintering habitat of the endangered whooping crane, including a 13.25 mile reach within the boundary of the Aransas National Wildlife Refuge. Also, provides for limited oil spill containment features and equipment to protect those areas from accidental hazardous spills.	Sec. 101 (29), PL 104-303
11.		**HOUSTON-GALVESTON NAVIGATION CHANNELS, TX**	
	Oct. 12, 1996	Provides for navigation and environmental restoration improvements. The navigation improvements consist of deepening and widening the Entrance Channel to 47 feet deep and 800 feet wide; the Houston Ship Channel to 45 feet deep and 530 feet wide; and the Galveston Channel to 45 feet deep. The environmental restoration portion consist of initial construction of marsh habitat and a colonial water bird nesting island through the beneficial use of new work dredged material, and incremental development (deferred construction) of additional marsh over the life of the navigation project through the beneficial use of maintenance materials dredged from Galveston Bay.	Sec. 101 (29) PL 104-303
	Oct. 27, 2000	Provides for barge lanes immediately adjacent to either side of the Houston Ship Channel, from Bolivar roads to Morgan Point, to a depth of 12 feet.	Appendix B, PL 106-377
12.		**HOUSTON SHIP CHANNEL, TX**	
	Mar. 5, 1905	Easing or cutting off sharp bends and construction of a pile dike.[18]	Rivers and Harbors Committee Doc. 35, 61st Cong., 2nd Sess.
	Mar. 2, 1919	A channel 30 feet deep, widen bend at Manchester and enlarge turning basin.	H. Doc. 1632, 65th Cong., 3rd Sess.
	Mar. 3, 1925	A light-draft extension of channel to mouth of White Oak Bayou.[19]	H. Doc. 93, 67th Cong., 1st Sess.
	Jul. 3, 1930	Widen channel through Morgan Point and to a point 4,000 feet above Baytown and widen certain bends.	H. Doc. 13, 71st Cong., 1st Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		HOUSTON SHIP CHANNEL, TX (continued)	
	Aug. 30, 1935[11]	Deepen to 32 feet in main channel and turning basin, and a 400-foot width through Galveston Bay.	Rivers and Harbors Committee Doc. 28, 72nd Cong., 1st Sess.
	Aug. 30, 1935	Deepen to 34 feet in main channel and widen from Morgan Point to turning basin	Rivers and Harbors Committee Doc. 58, 74th Cong., 1st Sess.
	Mar. 2, 1945	Branch channel 10 by 60 feet behind Brady Island.	H. Doc. 226, 76th Cong., 1st Sess.
	Mar 2, 1945	Widen channel from Morgan Point to lower end of Fidelity Island with turning points at mouth of Hunting Bayou and lower end of Brady Island.	H. Doc. 226, 76th Cong., 1st Sess.
	Mar. 2, 1945	Widen channel from lower end of Fidelity Island to Houston turning basin and dredge off-channel silting basins.	H. Doc. 737, 79th Cong., 2nd Sess.
	Jun. 30, 1948	Deepen to 36 feet from Bolivar Roads to and including main turning basin at Houston, Texas, including turning points at Hunting Bayou and Brady Island.	H. Doc. 561, 80th Cong., 2nd Sess.
	Jul. 3, 1958[20]	Deepen to 40 feet from Bolivar Roads to Brady Island, construct Clinton Island turning basin, a channel 8 by 125 feet at Five Mile Cut, and improve shallow-draft channel at Turkey Bend.	H. Doc. 350, 85th Cong., 2nd Sess.[1]
	Jul. 14, 1960	Barbour Terminal at Morgan Point.	Sec. 107, PL 86-645
	Oct. 27, 1965H. Doc. 257, 89th Cong., 1st Sess.	Restoring existing locally dredged channel from mile 0 to 0.34 to 36 feet deep and dredging a 15-12 ft. channel from mile 0.34 to 2.81, in Greens Bayou.[21]	H. Doc. 257, 89th Cong., 1st Sess.
	Nov. 17, 1986	Maintenance of Greens Bayou, Barbour Terminal Channel, and Bayport Ship Channel to forty-foot depths at Federal expense.	Sec. 819, PL 99-662
	Oct. 12, 1996	Provides for navigation and environmental restoration improvements. The navigation improvements consist of deepening and widening the Entrance Channel to 47 feet deep and 800 feet wide; the Houston Ship Channel to 45 feet deep and 530 feet wide; and the Galveston Channel to 45 feet deep. The environmental restoration portion consist of initial construction of marsh habitat and a colonial water bird nesting island through the beneficial use of new work dredged material, and incremental development (deferred construction) of additional marsh over the life of the navigation project through the beneficial use of maintenance materials dredged from Galveston Bay. The project is referred to as Houston-Galveston Navigation Channels.	Sec. 101 (30) PL 104-303
13.		**MATAGORDA SHIP CHANNEL, TX**	
	Jun. 25, 1910	Channel to Port Lavaca, Texas 7 feet deep and 89 feet bottom width.	H. Doc. 1082, 60th Cong., 2nd Sess.
	Aug. 30, 1935	Extend 7-foot channel to shoreline of Lavaca Bay at mouth of Lynns Bayou.	Rivers and Harbors Committee Doc. 28, 74th Cong., 1st Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		MATAGORDA SHIP CHANNEL, TX (continued)	
	Aug. 26, 1937	Deepen and widen channel to present project dimensions.	Rivers and Harbors Committee Doc. 37, 75th Cong., 1st Sess.
	Mar. 2, 1945	Extend channel 6 by 100 feet from Port Lavaca via Lavaca Bay, Lavaca and Navidad Rivers to Red Bluff, a distance of 20 miles.	H. Doc. 314, 76th Cong., 1st Sess.
	Mar. 2, 1945	A harbor of refuge 9 feet deep near Port Lavaca and an approach channel 100 feet wide and equal depth.	H. Doc. 731, 79th Cong., 2nd Sess.
	Jul. 3, 1958	Deepen to 12 feet and widen to 125 feet Port Lavaca Channel and approach channel to harbor of refuge; deepen to 12 feet Port Lavaca turning basin and basins at harbor of refuge.	H. Doc. 131, 84th Cong., 1st Sess.
	Jul. 3, 1958	An entrance channel 38 by 300 feet, a channel 36 by 200 feet, 22 miles long across Matagorda and Lavaca Bays to Point Comfort, Texas, a turning basin 36 feet deep and 1,000 feet square at Point Comfort, and dual jetties at entrance from gulf.	H. Doc. 388, 84th Cong., 2nd Sess.
14.		**NECHES RIVER AND TRIBUTARIES, SALT WATER BARRIER AT BEAUMONT, TX**	
	Oct. 22, 1976	Construct gated salt water barrier in Neches River consisting of seven 40 x 24.5 foot tainter gates; gated navigation by-pass channel with clear opening of 56 feet and depth of 16 feet; access road and levee; and auxiliary dam across canal which drains adjacent bayou.	Sec. 102, PL 94-587
15.		**SABINE-NECHES WATERWAY, TX.**	
	Jul. 25, 1912	Existing project dimensions of jetties, a 26-foot channel through Sabine Pass, Port Arthur Canal and Port Arthur turning basin; and a 26-foot turning basin at Port Arthur. A depth of 25-feet in Sabine-Neches Canal, Neches River to Beaumont and Sabine River to Orange, including cutoffs and widening channels.	H. Doc. 773, 61st Cong., 2nd Sess.
	Sep. 22, 1922	Deepen channels to 30 feet from gulf to Beaumont, with increased widths and an anchorage basin in Sabine Pass.	H. Doc. 975, 66th Cong., 3rd Sess.
	Sep. 22, 1922	Deepen Port Arthur east and west turning basins and approach channel to 30 feet. Take over and deepen to 30 feet channel connecting west turning basin with Taylors Bayou turning basin. For a 30-foot depth in channel from mouth of Neches River to cutoff in Sabine River near Orange.	S. Doc. 152, 67th Cong., 2nd Sess.
	Mar. 3, 1925	Removal of guard lock in Sabine-Neches Canal.	H. Doc. 234, 68th Cong., 1st Sess.
	Jan. 21, 1927	Widen Sabine Pass and jetty channel, Port Arthur Canal, and Sabine-Neches Canal. For dredging 2 passing places in Sabine-Neches Canal, easing of bends, removal and reconstructing Port Arthur field office, extending Beaumont turning basin upstream 200 feet above new city wharves, and an anchorage basin in Sabine Pass.	H. Doc 287, 69th Cong., 1st Sess.
	Aug. 30, 1935[11]	A depth of 32 feet in channels from gulf to Beaumont turning basin, including all turning basins at Port Arthur.	Rivers and Harbors Committee Doc. 27, 72nd Cong., 1st Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		SABINE-NECHES WATERWAY, TX (continued)	
	Aug. 30, 1935[11]	Deepen channels to 34 feet with increased widths from gulf to Beaumont turning basin.	Rivers and Harbors Committee Doc. 12, 74th Cong., 1st Sess.
	Aug. 30, 1935	Construct suitable permanent protective works along Sabine Lake. Maintain Taylors Bayou turning basin.	Specified in Act.
	Aug. 26, 1937	Maintain channel from Sabine River to Orange Municipal wharf.	Rivers and Harbors Committee Doc. 3, 75th Cong., 1st Sess.
	Aug. 26, 1937	Dredging 500 feet from eastern end of Harbor Island and abandonment of channel south and west of Harbor Island.	Rivers and Harbors Committee Doc. 20, 75th Cong., 1st Sess.
	Jun. 20, 1938[22]	Increased widths of channels from gulf to Beaumont turning basin and channel connecting Port Arthur west turning basin and Taylors Bayou turning basin, deepen Beaumont turning basin and Beaumont turning extension to 34 feet; and dredge a new cutoff from Smith's Bluff cutoff to McFadden Bend.	H. Doc. 581, 75th Cong., 3rd Sess.
	Oct. 17, 1940	Abandon Orange turning basin; dredge a channel 25 by 150 feet, suitably widened on bends to highway bridge, and dredge a cutoff channel opposite Orange.	S. Doc 14, 77th Cong., 1st Sess.
	Mar. 2, 1945	Extend Beaumont turning basin upstream 300 feet.	H. Doc. 685, 76th Cong., 3rd Sess.
	Mar. 2, 1945	Widen Port Arthur west turning basin to 600 feet.	S. Doc 60, 77th Cong., 1st Sess.
	Mar. 2, 1945	Dredge a channel from Beaumont turning basin to vicinity of Pennsylvania Shipyard.	S. Doc 158, 77th Cong. 2nd Sess.
	Jul. 24, 1946[23]	Deepen Sabine Pass outer bar channel to 37 feet, Sabine Pass jetty channel to 36 feet at inner end, deepen to 36 feet Sabine Pass Channel, Port Arthur Canal, Port Arthur east and west turning basins, Taylors Bayou turning basin and channel from Port Arthur west turning basin to Taylors Bayou turning basin, deepen to 36 feet and widen to 400 feet Sabine-Neches Canal from Port Arthur Canal to mouth of Neches River except through Port Arthur Bridge; deepen Neches River channel from mouth to Beaumont turning basin to 36 feet widening to 350 feet from Smith's Bluff to Beaumont turning basin; deepen junction area on Neches River at Beaumont turning basin to 36 feet; and widen Sabine-Neches Canal between Neches and Sabine Rivers to 150 feet.	H. Doc. 571, 79th Cong., 2nd Sess.
	Jul. 24, 1946[24]	Improve Cow Bayou, Texas, by construction of a channel 100 feet wide and 13 feet deep extending from navigation channel in Sabine River to a point 0.5 mile above county bridge at Orangefield, Texas, with a turning basin.	H. Doc. 702, 79th Cong., 2nd Sess.
	Jul. 24, 1946	Improve Adams Bayou, Texas, to provide a channel 12 feet deep and 100 feet wide extending from 12-foot depth in Sabine River to first county highway bridge across bayou.	H. Doc. 626, 79th Cong., 2nd Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		SABINE-NECHES WATERWAY, TX (continued)	
	May 17, 1950	Deepen to 36 feet and widen to 400 feet the Sabine-Neches Canal near Port Arthur bridge; reconstruct Port Arthur Bridge and relocate Port Arthur field office.	H. Doc. 174, 81st Cong., 1st Sess.
	Sep. 3, 1954[25]	Rectification of certain reaches of existing Sabine Pass Channel, Sabine-Neches Canal, and Neches River and Sabine River Channel; widen to 350 feet entrance channel to Port Arthur turning basins; widen curve at junction of Port Arthur and Sabine-Neches Canals; relocate and enlarge Sabine Pass anchorage basin to 34 by 1,500 by 3,000 feet; widen to 200 feet Sabine-Neches Canal from mouth of Neches River to mouth of Sabine River and Sabine River Channel to upper end of existing project at Orange, except for channel around Harbor Island at Orange; deepen to 30 feet Sabine River Channel from cutoff near Orange municipal slip to upper end of project, except around Harbor Island; and enlarge area at entrance to Orange municipal slip to provide a maneuvering basin.	S. Doc. 80, 83rd Cong., 2nd Sess.
	Oct. 23, 1962[26]	Improve outer bar channel to 42 and 40 feet for all inland channels to Port Arthur and Beaumont; width of 500 feet in Port Arthur Canal and 400 feet in Neches River Channel to Beaumont with three turning points in Neches River; a channel, 12 by 125 feet, extending in Sabine River to Echo; and replace an obstructive bridge at Port Arthur, Texas. Deauthorization of uncompleted portion of channel between Port Arthur west turning basin and Taylors Bayou turning basin and enlargement of entrance channel to Port Arthur turning basins.	H. Doc. 553, 87th Cong., 2nd Sess.[1]
16.		**TEXAS CITY CHANNEL, TX**	
	Mar. 4, 1913	A channel 300 by 30 feet and construct a pile dike 28,200 feet long north to channel.	H. Doc. 1390, 62nd Cong., 3rd Sess.
	Jul. 3, 1930	A harbor 800 by 30 feet at Texas City, and construct a rubblemound dike.	H. Doc. 107, 71st Cong., 1st Sess.
	Aug. 30, 1935[11]	Extension of rubblemound dike to shoreline.	Rivers and Harbors Committee Doc. 4, 73rd Cong., 1st Sess.
	Aug. 30, 1935	Deepen channel and harbor to 32 feet.	Rivers and Harbors Committee Doc. 46, 73rd Cong., 2nd Sess.
	Aug. 30, 1935	Deepen channel and harbor to 34 feet.	Rivers and Harbors Committee Doc. 62, 74th Cong., 1st Sess.
	Aug. 26, 1937	Extend harbor 1,000 feet southward, 800 by 34 feet.	Rivers and Harbors Committee Doc. 47, 75th Cong., 1st Sess.
	Jun. 30, 1948	Deepen channel and harbor to 36 feet, widen channel to 400 feet and harbor to 1,000 feet and changing name of project to "TEXAS CITY CHANNEL, TEXAS."	H. Doc. 561, 80th Cong., 2nd Sess.[1]

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		TEXAS CITY CHANNEL, TX (continued)	
	Jul. 14, 1960	Deepen channel and turning basin to 40 feet and construct 16-foot Industrial Barge Canal.	H. Doc. 427, 86th Cong., 2nd Sess.
	Oct. 12, 1972 Senate Res.) Oct. 12, 1972 (House Res.)	Widen the existing main turning basin to 1,200 feet including relocation of the basin 85 feet to the east; providing a 40-foot deep channel in the Industrial Canal at widths of 300-400 feet, with a turning basin at the head of the canal 40 feet deep, 1,150 feet long, and 1,000 feet wide, and easing of the bend at the entrance to the canal, and deauthorization of shallow-draft Industrial Barge Canal not incorporated in the plan of improvement above.	H. Doc. 199, 92nd Cong., 2nd Sess. (Sec. 201, PL 89-298)
	Nov. 17, 1986	Deepening the Texas City Turning Basin to 50 feet, enlarging the 6.7 mile long Texas City Channel to 50 feet by 600 feet; deepening the existing 800-foot wide Bolivar Roads Channel and Inner Bar Channel to 50 feet; deepening the existing 800-foot wide Outer Bar and Galveston Entrance Channels to 52 feet; extending the Galveston Entrance Channel to a 52 foot depth for 4.1 miles at a width of 800 feet and an additional reach at a width of 600 feet to the 52 foot contour in the Gulf of Mexico; and establishment of 600 acres of wetland and development of water-oriented recreational facilities on a 90-acre enlargement of the Texas City Dike.	Sec. 201, PL 99-662
17.		**TRINITY RIVER AND TRIBUTARIES, TX**	
	Jun. 18, 1878	Dredging of a channel through the bar at the mouth of the Trinity River.	
	1889	Modified to include two parallel jetties 275 feet apart, the westerly one of length 7,359 feet and the other of length 300 feet.	
	Jun. 13, 1902 (As amended Mar. 3, 1905, Mar. 2, 1907, Jun. 25, 1910, Jul. 25, 1912, Mar. 4, 1913, and Jul. 27, 1916)	Improvement of the Trinity River in the interest of providing navigation from the mouth of the Trinity River to Dallas. The plan provided for the construction of 37 locks and dams, with auxiliary dredging and other open-channel work necessary to obtain a 6-foot depth for continuous navigation (excepting periods of excessive drought). Each Act also authorized the construction of certain-named locks and dams.	H. Doc. 409, 56th Cong., 1st Sess.
	Mar. 3, 1905	Authorized the Anahuac Channel. No project dimensions were specified by the Act, so a 7- by 8-foot channel, 12,238 feet long was dredged in 1905.	Specified in Act.
	Sep. 22, 1922	Abandon improvements above Liberty and terminate all improvements by lock and dam, leaving a 6-foot channel from Liberty to mouth.	H. Doc. 989 66th Cong., 3rd Sess
	Mar. 2, 1945	Provides for a navigable channel from the Houston Ship Channel near Red Fish Bar in Galveston and Trinity Bays to the mouth of Trinity River and 9 feet deep and 150 feet wide in the river section, with a turning basin at Liberty.	H. Doc. 403, 77th Cong., 1st Sess.
	Jul. 24, 1946	Modification of the project to provide for a channel 9 feet deep and 150 feet wide from the Houston Ship Channel near Red Fish Bar in Galveston Bay extending along the east shore of Trinity Bay to the mouth of the Trinity River at Anahuac, including protective spoil embankment on the bay side of the channel in lieu of the 9 by 200-foot channel in Galveston and Trinity Bays.	H. Doc. 634, 79th Cong., 2nd Sess.

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		TRINITY RIVER AND TRIBUTARIES, TX (continued)	
	Oct. 23, 1962	Provides for the multiple-purpose Wallisville Reservoir, including a navigation lock in the Wallisville Dam at Channel Mile 28.30 and advancement of the Channel to Liberty from one mile below Anahuac (Mile 23.2) to the Texas Gulf Sulphur Company's slip at Channel Mile 35.8, and incorporation into existing project Anahuac Channel and mouth of Trinity River projects.	H. Doc. 215, 87th Cong., 1st Sess.
	Oct. 27, 1965	Reevaluation of navigation benefits.	H. Doc. 276, 89th Cong., 1st Sess.
	Jul. 30, 1983	Modified Wallisville Reservoir by reducing the size to 5,600 acres and confining the reservoir to east side of Trinity River.	PL 98-63
20.		**CORPUS CHRISTI BEACH, TX (RESTORATION PROJECT)**	
	Dec. 15, 1970 (House Res.) Dec. 17, 1970 (Senate Res.)	Restoration and periodic nourishment of 1.4 miles of beach.	H. Doc. 415, 91st Cong., 2nd Sess. (Sec. 201, PL 89-298)
21.		**BUFFALO BAYOU AND TRIBUTARIES, TX**	
	Jun. 20, 1938	Barker and Addicks Reservoirs, Texas.	H. Doc. 456, 75th Cong., 2nd Sess.
	Sep. 3, 1954	Clearing, straightening, enlarging and lining of Buffalo, Brays, and White Oak Bayous.	H. Doc. 250, 83rd Cong., 2nd Sess.[1]
	Oct. 27, 1965	Extend upper limits of White Oak Bayou upstream about 2.1 miles from BRI RR bridge to mouth of Cole Creek.	H. Doc. 169, 89th Cong., 1st Sess.
	Nov. 28, 1990	Flood damage reduction improvements and recreational development for the Houston, Texas urban area, divided into six separable elements – Brays, Greens, Hunting, Halls, Carpenters and Little White Oak Bayous. Flood control improvements consist of 75.3 miles of stream enlargement, 14 miles of stream clearing, 7 flood detention basins, 7 miles of diversion channels and environmental revegetation. Recreation features consist of 14.7 miles of trails, 502 picnic facilities, 12 group pavilions, 2 boat launching ramps, 10 restrooms, playgrounds, exercise stations and parking facilities.	Sec. 101, PL 101-640
	Oct. 12, 1996	Authorizes non-Federal interests to undertake flood control projects in the United States, subject to obtaining any permits required pursuant to Federal and State laws in advance of actual construction. For the purpose of demonstrating the potential advantages and effectiveness of non-Federal implementation of flood control projects, the Secretary shall enter into agreements pursuant to this section with non-Federal interests for development of the following Buffalo Bayou projects: Brays Bayou, Hunting Bayou, and White Oak Bayou.	Sec. 211, PL 104-303

TABLE 40-B AUTHORIZING LEGISLATION

See Section in Text	Date Authorizing Act	Project and Work Authorized	Documents
		BUFFALO BAYOU AND TRIBUTARIES (continued)	
	Oct. 12, 1996	The non-Federal interest for the Buffalo Bayou and tributaries authorized flood control projects, may be reimbursed by up to $5,000,000 or may receive a credit of up to $5,000,000 toward required non-Federal project cost-sharing contributions for work performed by the non-Federal interest at each of the following locations if such work is compatible with 1 or more of the following authorized projects: White Oak Bayou, Brays Bayou, Hunting Bayou, Garners Bayou (not authorized), and the Upper Reach of Greens Bayou.	Sec 350, PL 104-303
	Oct. 12, 1996	During any evaluation of economic benefits and costs that occurs after October 12, 1996, the Secretary shall not consider flood control works constructed by non-Federal interests within the drainage area of such projects prior to the date of such evaluation in the determination of conditions existing prior to construction of the following authorized projects: Buffalo Bayou Basin, Buffalo Bayou and Tributaries (Brays, Greens, Hunting, Halls, Little White Oak, and Carpenters Bayous), and Cypress Creek.	Sec. 575, PL 104-303
23.		**CLEAR CREEK, TX**	
	Aug. 13, 1968	Channel enlargement and rectification from upper end of Clear Lake at Mile 3.8 to improved channel Mile 34.8.[28]	H. Doc. 351, 90th Cong., 2nd Sess.
	Nov. 17, 1986	Modified local cooperation requirements of the 1968 authorization.	Sec. 1001, PL 99-662
24.		**CYPRESS CREEK, TX**	
	Nov. 17, 1988	Enlargement and rectification of lower 29.4 miles of Cypress Creek channel and recreational development	Sec. 3, PL 100-676
	Aug. 17, 1999	Modified the project to authorize a nonstructural flood control project.	Sec. 355(a), PL 106-53
25.		**LOWER RIO GRANDE BASIN, TX**	
	Nov 17, 1986	Channel improvements to provide drainage protection for the area in Hidalgo and Willacy Counties north of U.S. Highway 83, and for the area between U.S. Highway 83 and the Rio Grande in Hidalgo County; and to provide flood protection for the cities of McAllen, Edinburg, Raymondville, Edcouch, La Villa, and Lyford.	Sec 401, PL 99-662
	Aug. 17, 1999	Modified the project to authorize a nonstructural flood control project.	Sec. 355(a), PL 106-53
26.		**SIMS BAYOU, TX**	
	Nov. 17, 1986	Enlargement and rectification, with appropriate erosion control measures of 19.31 miles of Sims Bayou; environmental measures and riparian habitat along entire alignment, and recreational development.	Sec. 401, PL 99-662
	Sep. 29, 1989	Amended the Water Resources and Development Act (WRDA) of 1986 authorization as project cost estimate had exceeded limit established in Section 902 of WRDA 1986.	Sec. 103, PL 101-101

[1] Contains latest published maps.

[2] Extension of north jetty 1,950 feet and south jetty 1,265 feet considered inactive. (1975 Deauthorization list)

[3] Dredging 2,000 by 650-foot northerly extension of inner basin deauthorized.

[4] Included in Public Works Administration program September 6, 1933 and February 16, 1935.

[5] West leg of Wye junction with main channel deauthorized.

[6] Construction of lock in diversion dam at local expense considered inactive.

[7] Dredging upper 1.3 mile of channel to vicinity of Stauffer Chemical plant was deauthorized under Sec. 12 of PL 93-251. Included in Public Works Administration program September 6, 1933. (1975 Deauthorization list)

[8] Dredging 43rd to 51st Streets was deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[9] Deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[10] Deepening 43rd to 57th Streets was deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[11] Previously authorized September 6, 1933 by Public Works Administration.

[12] H. Doc. 230, 76th Cong., 1st Sess. and project documents contain latest published maps.

[13] Dredging upper 3.4 miles was deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[14] Dredging upper 5 miles was deauthorized under Sec. 1001 of PL 99-662.

[15] Inactive.

[16] Portion of 16-foot by 150-foot channel from Sabine River to Houston Ship Channel is inactive. Relocation of channel in Matagorda Bay deauthorized under Sec. 12 of PL 93-251. (1986 Deauthorization list)

[17] The 9 feet by 100 feet channel from Mile 8.2 to Mile 13.2 in Chocolate Bayou was deauthorized under Sec. 1001 of PL 99-662.

[18] Construction of pile dike was deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[19] Hill Street Bridge to mouth of White Oak Bayou was deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[20] Deepening channel to 40 feet from Southern Pacific Slip (mile 47) to Brady Island was deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[21] The 12-foot channel from mile 1.65 to mile 2.81 deauthorized under Sec. 12 of PL 93-251. (1985 Deauthorization list)

[22] Complete widening of channel between Port Arthur west turning basin and Taylors Bayou turning basin deauthorized by 1962 R&H Act.

[23] Complete deepening of channel between Port Arthur west turning basin and Taylors Bayou turning basin deauthorized by 1962 R&H Act.

[24] Channel extension above Cow Bayou turning basin near Orangefield was deauthorized under Sec. 12 of PL 93-251. (1975 Deauthorization list)

[25] Widening to 350 feet entrance channel to Port Arthur turning basin deauthorized by 1962 R&H Act.

[26] The 12-foot channel in Sabine River from Orange to Echo, Texas deauthorized under Sec. 12 of PL 93-251. (1985 Deauthorization list)

[27] Jetty extension was deauthorized under Sec. 1001 of PL 99-662.

[28] Portion of project upstream of Brazoria/Galveston County line, approximately mile 18.5, in inactive category.

[29] Cedar Bayou, miles 3 to 11 were deauthorized under Sec. 12 of PL 93-251 and were re-authorized under Sec. 349(a)(2), PL 106-541.

[30] Channel to Port Bolivar turning basin was deauthorized under Sec. 1001 of PL 99-662.

TABLE 40-C

OTHER AUTHORIZED NAVIGATION PROJECTS

Project	For Last Full Report See Annual Report For	Cost to September 30, 2000	
		Construction	Operation and Maintenance
Aquatic Plant Control (1958 and 1962 River and Harbor Acts)	1967	38,252	–
Bastrop Bayou, TX[2]	1931	9,920	27,129
Corpus Christi, TX, Channel to Navy Seaplane Base Encinal Peninsula	1968	1,194,344	26,467
Dickinson Bayou, TX	1954	33,942	57,553
East Bay (Hanna Reef), TX[3]	1922	2,476	847
Greens Bayou Bridges, TX	1993	450,000	–
Johnson Bayou, LA[4]	1933	2,261	54,042
Little Bay, TX[5]	1979	–	252,728
Oyster Creek, TX	1922	6,942	7,556

[1] Excludes $1,672 work contribution.

[2] Widening from 60 feet to 100 feet at 4-foot depth was deauthorized under Sec. 12 of PL 93-251.

[3] Inactive category for maintenance.

[4] Channel adequate for existing commerce.

[5] Aransas County Navigation District, Rockport, TX, constructed project as authorized by 1950 River and Harbor Act (H. Doc. 114, 81st Cong., 1st Sess.) in 1955 under Department of Army permit.

TABLE 40-D

OTHER AUTHORIZED FLOOD CONTROL PROJECTS

Project	For Last Full Report See Annual Report For	Cost to September 30, 2000	
		Construction	Operation and Maintenance
Arroyo Colorado, Rio Hondo, TX[1]	1986	201,300	–
Buffalo Bayou at Piney Point, TX[2]	1996	473,800[9]	–
Colorado River, Matagorda, TX[2]	1963	273,757	–
Falfurrias, TX[1]	1995	103,454	–
Freeport and Vicinity, Texas, Hurricane-Flood Protection[2]	1984	29,285,042[3]	–
Guadalupe River at Victoria, TX[2]	1996	532,187[10]	
Guadalupe River (Remove Log Jams), TX[2]	1978	505,749	–
Highland Bayou, TX[13]	1984	12,254,390	–
Kirbyville, TX[2]	1993	1,484,613[4]	–
Lavaca-Navidad River, TX: Hallettsville Project	1961	256,043	–
Port Arthur and Vicinity Hurricane-Flood Protection, TX[2]	1997	61,400,292[11]	–
San Diego Creek, Alice, TX[2]	1963	135,175	–
State Highway 111 Bridge, Lake Texana, TX[2]	1995	214,155[5]	–
Taylors Bayou, TX[2]	1997	37,413,209[12]	–
Texas City and Vicinity, Texas, Hurricane-Flood Protection[2]	1993	38,882,400[7]	–
Tranquitas Creek, Kingsville, TX[2]	1956	130,239	–
Three Rivers, TX[5]	[6]	5,835,927[5]	–
Upper White Oak Bayou, TX[2]	1989	972,300	–
U.S. 190 Bridge, Sabine River, Merryville, LA[2]	1993	500,000[8]	–
Vince and Little Vince Bayous, TX[2]	1993	19,307,100	–

[1] Inactive.

[2] Completed.

[3] In addition, $8,695,438 expended from contributed funds, $1,126,905 estimated value of contributed lands, and $2,726,446 for relocations by local interests.

[4] In addition, $1,484,613 expended from contributed funds, estimated value of $200,096 for contributed lands, and $202,456 for relocations by local interests.

[5] In addition, $71,370 expended from contributed funds.

[6] See Annual Report for 1983, Fort Worth District, page 16-12.

[7] In addition, $14,396,307 expended from contributed funds, estimated value of $1,224,219 for contributed lands, and contributed work in the amount of $1,070,806 by local interests. Work performed at 100% Local Sponsor expense was in the amount of $320,347.

[8] In addition, $237,792 expended from contributed funds.

[9] In addition, $92,920 expended from contributed funds.

[10] In addition, $480,888 expended from contributed funds.

[11] In addition, $16,976,675 expended from contributed funds.

[12] In addition, $12,340,997 expended from contributed funds.

[13] Completed. Lower 8.6 miles of channel rectification on Highland Bayou was de-authorized April 5,1999.

TABLE 40-E
OTHER AUTHORIZED ENVIRONMENTAL RESTORATION PROJECTS

Project	For Last Full Report See Annual Report For	Cost to September 30, 2000	
		Construction	Operation and Maintenance
Laguna Madre Seagrass Restoration, TX [1]	1998	225,440[2]	–
Salt Bayou, McFadden Ranch, TX[1]	1997	1,754,000[3]	–

[1] Completed
[2] In addition $75,146 expended from contributed funds.
[3] In addition, $576,877 expended from contributed funds and an estimated value of contributed lands in the amount of $8,000.

TABLE 40-F DEAUTHORIZED PROJECTS

Project	For Last Full Report See Annual Report For	Date And Authority	Federal Funds Expended	Contributed Funds Expended
Baytown	1980	Sec. 1001 of PL 99-662	245,000	------
Brazos River, TX, Velasco to Old Washington	1924	Sec. 1001 of PL 99-662 17 Nov 1986	216,989[1]	223,010
Corpus Christi Ship Ch - 1913 Act Jetty	------	Sec. 1001 of PL 99-662 19 Jul 1992	------	------
GIWW, Harbor Refuge at Seadrift	1978	Sec. 1001 of PL 99-662 19 Jul 1992	79,041	------
Liberty Local Protection Project, TX	1971	Sec. 1001 of PL 99-662 17 Nov 1986	98,517	------
Mill Creek Brazos River, Austin Co. 1946 Act	1952	Sec. 1001 of PL 99-662 1 Jan 1990	24,753	------
Navidad & Lavaca Rivers, Jackson and Lavaca Counties- General Channel Project	1952	Sec. 1001 of PL 99-662 1 Jan 1990	21,086	------
Peyton Creek, TX	1975	Sec. 1001 of PL 99-662 17 Nov 1986	66,377	------
Sabine River and Tributaries, TX (Echo to Morgan Bluff)	1971	Sec. 1001 of PL 99-662 17 Nov 1986	------	------

[1] Includes $123,676 for previous projects.

TABLE 40-G TOTAL COST OF EXISTING PROJECTS

See Section In Text	Project	Funds	New Work	Maintenance	Rehabilitation	Total Cost to Sep. 30, 2000
2.	Brazos Island Harbor, TX	Regular	24,346,787	60,937,887	2,170,080	87,454,754
		Public Works	2,848,560	0	0	2,848,560
		Contributed	10,571,509	1,352,092	0	11,923,601
		Total cost of project	37,766,856	62,289,979	2,170,080	102,226,915
3.	Cedar Bayou, TX	Regular	642,176	4,154,716	0	4,796,892
		Contributed	0	0	0	0
		Total cost of project	642,176	4,154,716	0	4,796,892
4.	Channel to Port Bolivar, TX	Regular	85,214	1,335,578	0	1,420,792
		Total cost of project	85,214	1,335,578	0	1,420,792
6.	Corpus Christi Ship Channel, TX	Regular	75,775,642	125,595,108	3,576,684	204,947,434
		Public Works	324,287	0	0	324,287
		Contributed	6,143,152	1,071,952	0	7,215,104
		Total	82,243,849	126,667,060	3,576,684	212,487,593
		Value of useful work performed	1,716,695	0	0	1,716,695
		Contributed land	276,720	0	0	276,720
		Total cost of project	84,237,264	126,667,060	3,576,684	214,481,008
8.	Freeport Harbor, TX	Regular	64,502,299	84,722,379	8,935	149,233,613
		Public Works	116,575	0	0	116,575
		Contributed	20,811,568	229,311	0	21,040,879
		Total	85,425,873	84,951,690	8,935	170,386,498
		Value of useful work performed	360,249	0	0	360,249
		Total cost of project	85,786,122	84,951,690	8,935	170,746,747
9.	Galveston Harbor and Channel, TX	Regular				
		Channel	11,920,187	118,135,105	7,373,356	137,428,648
		Seawall	8,754,209	512,163	595,973	9,862,345
		Public Works	0	13,121	0	13,121
		Contributed	3,648,932	2,982,425	0	6,631,357
		Total cost of project	24,323,328	121,642,814	7,969,329	153,935,471
10.	Gulf Intracoastal Waterway between Apalachee Bay, FL and the Mexican Border	Regular	142,080,051	488,054,908	3,390,338	633,525,297
		Public Works	466,477	0	0	466,477
		Inland WW. Trust Fund	28,634,490	0	2,955,700	31,590,190
		Contributed	5,774,661	1,811,028	0	7,585,689
		Total	176.955,679	489,865,936	6,346,038	673,167,653
		Value of useful work performed	395,000	0	0	395,000
		Contributed land	139,776	0	0	139,776
		Total cost of project	177,490,455	489,865,936	6,346,038	673,702,429
11.	Houston Ship Channel, TX	Regular	29,042,293	182,261,387	0	211,303,680
		Public Works	2,612,932	15,479,239	0	18,092,171
		Contributed	1,382,760	551,583	0	1,934,343
		Total cost of project	33,037,985	198,292,209	0	231,330,194
15.	Sabine-Neches Waterway, TX	Regular	49,592,331	243,869,563	0	293,461,894
		Public Works	1,363,652	0	0	1,363,652
		Contributed	2,103,435	5,938,114	0	8,041,549
		Total	53,059,418	249,807,677	0	302,867,095
		Value of useful work performed	32,000	0	0	32,000
		Contributed land	116,760	0	0	116,760
		Total cost of project	53,208,178	249,807,677	0	303,015,855

TABLE 40-G TOTAL COST OF EXISTING PROJECTS

See Section In Text	Project	Funds	New Work	Maintenance	Rehabilitation	Total Cost to Sep. 30, 2000
16.	Texas City Channel, TX	Regular	14,653,853	32,666,573	726,158	48,046,584
		Public Works	136,296	0	0	136,296
		Contributed	1,023,819	0	0	1,023,819
		Total cost of project	15,813,968	32,666,573	726,158	49,206,699
17.	Trinity River and Tributaries, TX	Regular	78,076,507	24,956,907	0	103,033,414
		Contributed	66,000	0	0	66,000
		Total cost of project	78,142,507	24,956,907	0	103,099,414

TABLE 40-H CHANNEL DIMENSIONS

See Section In Text	Project	Section of Waterway	Adopted Project Dimensions: Depth in Feet (Below Mean Low Tide)	Adopted Project Dimensions: Bottom Width (Feet)	Improved Project Dimensions: Depth in Feet (Below Mean Low Tide)	Improved Project Dimensions: Bottom Width (Feet)	Length: Feet	Length: Miles
2.	Brazos Island Harbor, TX	Outer Bar and Jetty Channel	44	400	44	400		2.5
		Padre Island to Long Island	42	250	42	250		2.1
		Long Island to Goose Island	42	250	42	250		9.6
		Goose Island to Turning Basin Extension	42	300	42	300		3.2
		Turning Basin Extension	42	325	42	375		1.3
		Brownsville Turning Basin	36	1,200	36	660-1,200	2,670	0.5
		Port Isabel Channel via East Turnout	36	200	36	200		1.4
		West Wye, from Brownsville Channel	36	200	36	200		0.8
		Port Isabel Turning Basin	36	200-1,000	36	200-1,000	1,300	0.2
		Fishing Boat Harbor:						
		West Basin	15	370-305	15	370-305	1,470	0.3
		Middle Basin	15	370-305	15	370-305	1,200	0.2
		East Basin	15	370	15	370	1,470	0.3
		Connecting Channel	15	270	15	265	1,230	0.2
		Entrance Channel	15	100	15	100	770	0.1
3.	Cedar Bayou, TX	Houston Ship Channel to Bayou Mile 3.0	10	100	10	100		5.7
		Bayou Mile 3.0 to Mile 11.0[7]	10	100	-	-		-
4.	Channel to Port Bolivar, TX	Port Bolivar Channel	30	200	30	200	–	–
		Turning Basin	30	750[1]	14	200	900	0.2
5.	Clear Creek and Clear Lake, TX	Galveston Bay to Clear Creek	7	75	7	75		1.5
		North Fork Channel	7	60	7	60		0.7
		Channel through Clear Creek and Clear Lake	7	60	7	60		7.7

TABLE 40-H CHANNEL DIMENSIONS

See Section In Text	Project	Section of Waterway	Adopted Project Dimensions: Depth in Feet (Below Mean Low Tide)	Adopted Project Dimensions: Bottom Width (Feet)	Improved Project Dimensions: Depth in Feet (Below Mean Low Tide)	Improved Project Dimensions: Bottom Width (Feet)	Length: Feet	Length: Miles
6.	Corpus Christi Ship Channel, TX	Aransas Pass Outer Bar Channel	47	700	47	700		1.8
		Aransas Pass Jetty Channel	45	600-730	45	600		1.0
		Inner Basin at Harbor Island	45	730-1,720	45	Irregular	1,550	–
		Channel to Port Aransas	12	100-150	12	100		0.1
		Port Aransas Turning Basin	12	200-400[2]	12	200[2]	200	–
		Anchorage Basin at Port Aransas	12	300-400	12	300-400	900	0.2
		Inner Basin to Mile 8.5	45	600-500	45	600-500		8.5
		Mile 8.5 to LaQuinta Junction	45	500	45	500		3.6
		LaQuinta Junction to Corpus Christi Turning Basin	45	400	40-45	400		8.6
		Corpus Christi Turning Basin	45	800	45	1,000	5,423	1.0
		Industrial Canal	45	400	45	400		1.1
		Avery Point Turning Basin	45	975	45	1,000	1,150	0.2
		Channel to Chemical Turning Basin	45	400	45	350		0.6
		Chemical Turning Basin	45	1,200[5]	45	1,050[5]	1,690	0.3
		Tule Lake Channel	45	300	40	200		3.1
		Tule Lake Turning Basin	45	1,200	40	900	1,000	0.2
		Viola Channel	45	300-350	40	200-250		1.8
		Viola Turning Basin	45	1,200	40	700-900	1,000	0.2
		Channel to LaQuinta	45	300-400	45	300-400		5.6
		LaQuinta Turning Basin	45	1,200	45	1,200	800	0.1
		Turning Point at LaQuinta Channel Junction	45	1,250[3]	45	1,250[3]	1,250	0.2
		Jewel Fulton Canal	12	100	12	100	–	0.8
		Jewel Fulton Turning Basin	12	200	12	200	400	0.1
		Mooring Area at Ingleside:						
		Mooring Area (a)	45	150	45	150	–	0.8
		Mooring Area (b)	45	150	–	–	–	–
7.	Double Bayou, TX	Double Bayou Channel:						
		Mouth to 7-foot contour in Trinity Bay	7	125	7	125	–	3.9
		West Fork	7	100	7	100	–	2.0
8.	Freeport Harbor, TX	Outer Bar Channel	47	400	47	300	–	3.0
		Jetty Channel	45	400	45	200	–	0.8
		Quintana Turning Basin	45	750[4]	–	–	–	–
		Channel to Brazosport Turning Basin	45	400	45	390	–	1.2
		Brazosport Turning Basin	45	1,000[4]	45	1000	667	0.1
		Channel to Upper Turning Basin	45	285-375	45	285-375	–	1.4
		Upper Turning Basin	45	1,200[4]	45	1200[4]	800	0.1
		Channel to Stauffer Chemical Plant	30	200	30	200	–	1.1
		Stauffer Turning Basin	30	500	25	500	500	0.1
		Brazos Harbor Channel	36	200	30	200	–	0.5
		Brazos Harbor Turning Basin	36	750[4]	30	750[4]	675	0.1

TABLE 40-H CHANNEL DIMENSIONS

See Section In Text	Project	Section of Waterway	Adopted Project Dimensions: Depth in Feet (Below Mean Low Tide)	Adopted Project Dimensions: Bottom Width (Feet)	Improved Project Dimensions: Depth in Feet (Below Mean Low Tide)	Improved Project Dimensions: Bottom Width (Feet)	Length: Feet	Length: Miles
9.	Galveston Harbor and Channel, TX	Entrance Channel	52	800	42	800	–	4.7
		Outer Bar Channel	52	800	42	800	–	1.7
		Inner Bar Channel	50	800	40	800	–	3.2
		Anchorage Basin	36	2,875[1]	36	2,875	–	1.8[1]
		Bolivar Roads Channel	50	800	40	800	–	1.0
		Bolivar Roads Channel to 43rd St.	40	1,125	40	1,125	–	3.9
12.	Houston Ship Channel, TX	Bolivar Roads to Morgan Point	40	400	40	400	–	26.2
		Morgan Point to Boggy Bayou	40	400	40	400	–	12.8
		Boggy Bayou to Greens Bayou	40	300	40	300	–	2.4
		Greens Bayou to Sims Bayou	40	300	40	300	–	5.3
		Hunting Bayou Turning Point	40	900-1,000[9]	40	948-1,000[9]	1,375	–
		Clinton Island Turning Basin	40	800[9]	40	965-1,070[9]	1,592	–
		Sims Bayou to Southern Pacific Slip	40	300	40	300	–	0.6
		Southern Pacific Slip to Houston Turning Basin	36	300	36	300	–	2.9
		Houston Turning Basin	36	400-1,000	36	400-1,000	3,100	0.6
		Upper Turning Basin	36	150	36	150	1,000	0.2
		Brady Island Channel	10	60	10	60	–	0.9
		Barbour Terminal Channel	40	300	40	300	–	3.1
		Turning Basin	40	2,000	40	2,000	2,000	0.4
		Bayport Ship Channel	40	300	40	300	–	3.8
		Turning Basin	40	1,600	40	1,600	1,000	0.3
		Anchorage Area	40	150	40	150	–	–
		Five-Mile Cut Channel	8	125	8	125	–	1.9
		Light-Draft Channel:						
		Upper Turning Basin to Jensen Drive	10	60	10	60	–	4.1
		Turkey Bend Channel	10	60	10	60	–	0.8
		Greens Bayou Channel:						
		Mile 0 to Mile 0.36	40	175	40	175	–	0.3
		Mile 0.36 to Mile 1.57	15	100	15	100	–	1.3
13.	Matagorda Ship Channel, TX	Outer Bar and Jetty Channel	38	300	38	300	–	3.2
		Channel to Point Comfort	36	300-200[6]	36	300-200[6]	–	20.9
		Approach Channel to Turning Basin	36	200-300	36	200-300	–	1.1
		Turning Basin	36	1,000	36	1,000	1,000	0.2
		Channel to Port Lavaca	12	125	12	125	–	4.1
		Lynn Bayou Turning Basin	12	27-340	12	27-340	532	0.1
		Channel to Harbor of Refuge	12	125	12	125	–	1.9
		North-South Basin	12	300	12	300	1,682	0.3
		East-West Basin	12	250	12	250	1,750	0.3
		Channel to Red Bluff	6	100	6	100	–	20.2

TABLE 40-H CHANNEL DIMENSIONS

See Section In Text	Project	Section of Waterway	Adopted Project Dimensions: Depth in Feet (Below Mean Low Tide)	Adopted Project Dimensions: Bottom Width (Feet)	Improved Project Dimensions: Depth in Feet (Below Mean Low Tide)	Improved Project Dimensions: Bottom Width (Feet)	Length: Feet	Length: Miles
15.	Sabine-Neches Waterway, TX	Sabine Bank Channel	42	800	42	800	–	14.7
		Sabine Pass Outer Bar Channel	42	800	42	800	–	3.4
		Sabine Pass Jetty Channel	40	800-500	40	800-500	–	4.1
		Sabine Pass Anchorage Basin	40	1,500	40	1,500	3,000	–
		Sabine Pass Channel	40	500	40	500	–	5.6
		Port Arthur Canal	40	500	40	500	–	6.2
		Entrance to Port Arthur Turning Basins	40	275-678	40	275-678	–	0.3
		Port Arthur East Turning Basin	40	420	40	370-547	1,765	0.3
		Port Arthur West Turning Basin	40	600	40	350-550	1,610	0.3
		Channel connecting Port Arthur West and Taylors Bayou Turning Basins	40	200-250	40	200-250	–	0.6
		Taylors Bayou Turning Basin	40	150-1,000	40	90-1,233	3,470	0.7
		Sabine-Neches Canal, Port Arthur Canal to Neches River	40	400	40	400	–	11.2
		Turning Point at Mile 19.5	40	900[4]	40	900[4]	–	[8]
		Neches River, Mouth to Maneuvering Area Beaumont Turning Basin	40	400	40	400	–	18.3
		Turning Point, Mile 31.1	40	1,000[4]	40	1,000	700	[8]
		Turning Point, Mile 36.6	40	1,000[4]	40	1,000	930	[8]
		Turning Point, Mile 40.3	40	1,000[4]	40	1,300	1,530	[8]
		Channel Extension, Mile 40.3	36	350	36	350	1,265	0.2
		Maneuvering Area at Beaumont Turning Basin	40	Irregular	40	Irregular	1,300	0.2
		Beaumont Turning Basin	34	500	34	160-535	1,500	0.3
		Beaumont Turning Basin Extension	34	350	34	300	–	0.4
		Beaumont Turning Basin Extension to End of Project						
		Channel Vicinity Bethlehem Steel Company	30	200	30	200	–	0.7
		Sabine-Neches Canal, Neches River to Sabine River	30	200	30	200	–	4.4
		Sabine River Channel, Mouth to Foot of Green Ave.	30	200	30	200	–	9.5
		Orange Turning Basin	30	Irregular	30	Irregular	1,550	0.3
		Orange Municipal Slip	30	200	30	150-200	2,435	0.5
		Old Channel Around Harbor Island	25	150-200	25	150-200	–	2.4
		Channel to Echo[7]	12	125	–	–	–	–
		Adams Bayou	12	100	12	100	–	1.7
		Cow Bayou	13	100	13	100	–	7.0
		Orangefield Turning Basin	13	300	13	300	500	0.1
16.	Texas City Channel, TX	Texas City Channel	50	600	40	400	–	6.8
		Turning Basin	50	1,000-1,200	40	1,000	4,253	.8
		Industrial Barge Canal:[10]						
		Channel from Texas City Turning Basin to Mile 1.7	40	300-400	–	–	–	–
		Turning Basin	40	1,000	–	–	–	–

TABLE 40-H CHANNEL DIMENSIONS

See Section In Text	Project	Section of Waterway	Adopted Project Dimensions: Depth in Feet (Below Mean Low Tide)	Adopted Project Dimensions: Bottom Width (Feet)	Improved Project Dimensions: Depth in Feet (Below Mean Low Tide)	Improved Project Dimensions: Bottom Width (Feet)	Length: Feet	Length: Miles
17..	Trinity River Channel, TX	Multiple Purpose Channel to Fort Worth[11]	12	200	–	–	–	–
		Channel to Liberty[12]	9	150	6	100	–	41.4
		Anahuac Channel	6	100	6	100	–	5.8

[1] Average.
[2] Includes 100-foot channel width.
[3] Includes 450-foot channel to Corpus Christi.
[4] Diameter.
[5] Includes 350-foot channel width.
[6] 300-foot width through Matagorda Peninsula.
[7] Deauthorized.
[8] Included in channel length.
[9] Includes 300-foot channel width.
[10] Channel dredged 34 feet deep by 250-200 feet wide by 9,908 feet long and basin 34 feet deep by 1,000 feet wide by 1,150 feet long by local interests.
[11] Not constructed.
[12] 9-foot by 150-foot channel completed from Houston Ship Channel to a point one mile below Anahuac, a distance of 23 miles. Upper end not connected to river channel to prevent salt intrusion into river. River channel maintained at 6 by 100-foot from mouth to Liberty, Texas.

TABLE 40-I GULF INTRACOASTAL WATERWAY APALACHEE BAY, FL. TO MEXICAN BORDER EXISTING PROJECT DIMENSIONS , PROVIDED FOR IN TRIBUTARY CHANNELS

	Adopted Project Dimensions		Improved Project Dimensions			
Tributary Channel	Depth in Feet (Below Mean Low Tide)	Bottom Width (Feet)	Depth in Feet (Below Mean Low Tide)	Bottom Width (Feet)	Length Feet	Length Miles
Offats Bayou						
Main Channel	12	125	12	125	–	2.3
West Wye	12	125	12	125	2,200	0.4
Chocolate Bayou Channel [1]						
12-Foot Channel via						
East Turnout [2]	12	125	12	125	–	8.2
West Turnout [3]	12	125	12	125	–	0.8
9-Foot Channel [4]	9	100	–	–	–	–
Turning Basin	9	600	–	–	–	–
San Bernard River Channel [5]	9	100	9	100	–	26.0
Colorado River Channel [6]	9	100	9	100	–	15.5
Turning Basin	9	400	9	400	500	0.1
Silting Basin	9	150	9	150	–	1.0
Mouth of Colorado River [7]						
Navigation Channel, GIWW to Gulf	15-12	100-200-300	15-20	100-200-300	–	–
Turning Basin at Matagorda	12	350	–	–	–	–
Channel to Palacios [8]	12	125	12	125	–	16.1
Turning Basin No. 1	12	200	12	200	635	0.1
Turning Basin No. 2	12	300	12	300	1,130	0.2
Connecting Channel	12	150-480	12	130-400	–	0.1
Channel to Barroom Bay [9]	12	60	–	–	–	–
Channel to Victoria Main Channel via						
East Turnout	12	125	12	125	–	34.8
Turning Basin	12	600(AVG)	9	500(AVG)	800(AVG)	0.1
West Turnout Channel	12	125	12	125	–	0.8
Channel to Seadrift via South Turnout	9	100	9	100	–	2.0
Turning Basin	9	250	9	200	230	–
North Turnout Channel	9	100	9	100	–	0.5
Harbor of Refuge at Seadrift Channel	9	100	–	–	–	–
Basin	9	200	–	–	–	–
Channel to Rockport	9	200	9	200	–	2.1
Turning Basin	9	475	9	342(AVG)	1,225	0.2
Channel to Aransas Pass	14	175	14	125-175	–	6.1
Turning Basin	14	300	14	300	2,212	0.4
Channel to Conn Brown Harbor	14	125	14	0.2	125	–
Conn Brown Harbor	14	300	14	300	1,800	0.3
Channel to Port Mansfield [10]						
Entrance Channel	16	250	16	250	–	0.8
Approach Channel to Hopper Dredge						
Turning Basin	16	100	16	100	–	0.4
Hopper Dredge Turning Basin	16	300	16	300	300	0.1
Channel Across Padre Island and						
Laguna Madre	14	100	14	100	–	7.7
Turnout Channels, East Side of Main Channel, GIWW						
North Turnout	12	100	12	100	–	0.6
South Turnout	12	100	12	100	–	0.6

TABLE 40-I GULF INTRACOASTAL WATERWAY

APALACHEE BAY, FL. TO MEXICAN BORDER

EXISTING PROJECT DIMENSIONS ,

PROVIDED FOR IN TRIBUTARY CHANNELS

	Adopted Project Dimensions		Improved Project Dimensions			
Tributary Channel	Depth in Feet (Below Mean Low Tide)	Bottom Width (Feet)	Depth in Feet (Below Mean Low Tide)	Bottom Width (Feet)	Length Feet	Length Miles
Channel West Side of Main Channel, GIWW, to P.T. of Turnout Channels	14	100	14	100	–	0.6
Turnout Channels, West Side of Main Channel, GIWW						
North Turnout	12	200	12	200	–	0.6
South Turnout	12	200	12	200	–	0.6
Channel from P.T. of Turnout Channels to ApproachChannel to Main Turning Basin	14	125	14	125	–	0.6
Approach Channel to Main Turning Basin	14	200	14	200	–	0.3
Main Turning Basin	14	400	14	400	1,250	0.2
Turning Basin Extension	14	1,000	14	1,000	580	0.1
Small Craft Basin	8	160	8	160	860	0.2
Shrimp Basin	12	350	12	350	1,450	0.3
Channel to Harlingen via South Turnout from Main Channel, GIWW	12	125	12	125[11]	–	25.8[12]
Turning Basin near Rio Hondo	12	400	12	400	500	0.1
North Turnout from Main Channel	12	200	12	200	–	0.7
Port Isabel Side Channels						
Main Channel	12	125	12	125-90	–	0.6
Main Channel	12	233-60	12	233-60	–	0.4
South Leg	12	125	12	125	–	0.2
Port Isabel Side Channels						
Main Channel	12	125	12	125-90	–	0.6
Main Channel	12	233-60	12	233-60	–	0.4
South Leg	12	125	12	125	–	0.2
Port Isabel Small Boat Harbor						
Entrance Channel	7	75	7	75	–	1.4
Harbor Channel	6	50	6	50	–	0.3
Boat Basin	6	Variable	6	72-501	1,308	0.2

[1] Includes the construction of a salt water barrier at Mile 16.9.

[2] Constructed 10 feet deep by 100 feet wide by local interests. East turnout channel constructed 150 feet wide.

[3] Constructed by local interests.

[4] Authorized to mile 13.2. Mile 8.2 to Mile 13.2 was deauthorized.

[5] Authorized to Mile 31 above mouth (channel mile 29.41). Upper 3.4 miles was deauthorized under Section 12 of PL 93-251.

[6] Includes a discharge channel from Matagorda, Texas, to the gulf, which was dredged by local interests in 1939. (Maintenance will be discontinued upon completion of improvements authorized by R&H Act of 1968.)

[7] Authorized by R&H Act of 1968. Also provides for a dam across the present discharge channel, a new 250-foot wide by 20 to 23-feet deep discharge channel into Matagorda Bay, and a 15-foot by 200-foot wide entrance channel with parallel jetties from the gulf shoreline into the Gulf of Mexico. East jetty to be 3,500 feet long and west jetty 2,900 feet long.

[8] Includes two protective breakwaters at entrance to turning basins.

[9] In the inactive category for maintenance.

[10] Also provides for two stone jetties at the gulf entrance about 1,000 feet apart. (North jetty constructed 2,300 feet long and south jetty constructed 2,270 feet long.)

[11] South turnout is 200 feet wide.

[12] Authorized to mile 31. Mile 25.8 to Mile 31 was deauthorized.

TABLE 40-J DREDGING OPERATIONS

See Section In Text	Project	Description	Period	Cubic Yards of Materials	FY 00 Cost
2.	Brazos Island Harbor, TX (Maintenance)	Dredging Brownsville Ship Channel Port Isabel Channel and Turning Basin	August 23, 2000 to September 30, 2000	0	$50,000[1]
3.	Cedar Bayou, TX (Maintenance)	Dredging Cedar Bayou	October 1, 1999 to January 20, 2000	0	$141,582[2]
4.	Channel to Bolivar (Maintenance)	Dredging GIWW, High Island to Bolivar	October 1, 1999 to June 30, 2000	89,544	$138,498
6.	Corpus Christ Ship Channel, TX (Maintenance)	Dredging LaQuinta Channel and Turning Basin	September 15, 2000 to September 30, 2000	0	$50,000[1]
8.	Freeport Harbor, TX (Maintenance)	Dredging Freeport Entrance Channel	October 1, 1999 to December 11, 1999	1,555,615	$2,302,702
		Dredging Entrance, Jetty and Inside Channels and Coast Guard Basin	July 20, 2000 to September 21, 2000	1,867,570	$2,239,960
9.	Galveston Harbor and Channel, TX (Maintenance)	Dredging Bolivar Roads to Pier B, COE Boat Basin, US Coast Guard Docking Facilities	February 28, 2000 to September 13, 2000	4,368,841	$3,370,650
		Dredging Jetty & Entrance Channel (O&M Galveston Portion)	October 1, 1999 to July 20, 2000	1,101,252	$2,973,379
10.	Gulf Intracoastal Waterway, TX				
	Channel to Victoria (New Work)	Dredging Channel to Victoria Stations 835+00 to 1300+00	October 1, 1999 to August 20, 2000	1,170,090	$3,858,122[4]
		Dredging Channel to Victoria Stations 1300+00 to 1841+21	September 29, 2000 to September 30, 2000	0	$0
	GIWW- Main Channel (Maintenance)	Dredging Boggy Bayou to Colorado River	October 1, 1999 to October 19, 1999	119,392	$30,000
		Dredging Turnstake Island to Rattlesnake Island	October 1, 1999 to October 12, 1999	910,021	$266,400
		Dredging Colorado River to Matagorda Bay	October 1, 1999 to July 21, 2000	3,142,085	$4,989,119
		Dredging High Island to Port Bolivar	October 1, 1999 to June 30, 2000	972,771	$2,718,876
		Dredging Port O'Connor to San Antonio Bay	October 14, 1999 to June 8, 2000	823,009	$1,595,934
		Dredging GIWW, Main Channel in Matagorda Bay	October 27, 1999 to April 6, 2000	322,363	$1,533,165
		Dredging Baffin Bay through Mud Flats	December 27, 1999 to March 20, 2000	958,217	$1,120,724
		Dredging Port Mansfield to Mud Flats	January 14, 2000 April 10, 2000	2,104,117	$1,956,935

TABLE 40-J DREDGING OPERATIONS

See Section In Text	Project	Description	Period	Cubic Yards of Materials	FY 00 Cost
10.	GIWW- Main Channel (Maintenance) Continued	Dredging Galveston Causeway to Bastrop Bayou	August 16, 2000 to September 30, 2000	353,315	$768,316
	Chocolate Bayou (Maintenance)	Dredging Chocolate Bayou	October 1, 1999 to October 12, 1999	1,053,072	$832,860[5]
	Channel to Harlingen (Maintenance)	Dredging Channel to Harlingen	May 9, 2000 to September 20, 2000	533,363	$1,622,750
	Channel to Port Mansfield (Maintenance)	Dredging Channel to Port Mansfield	May 9, 2000 to September 20, 2000	392,763	$482,508
	Mouth of Colorado River, TX (Maintenance)	Dredging Boggy Bayou to Colorado River	October 1, 1999 to October 19, 1999	114,428	$235,722
		Dredging Mouth of Colorado River, Navigation Channel and Impoundment Basin	March 13, 2000 to September 30, 2000	701,967	$2,027,247
11.	Houston-Galveston Navigation Channels, TX (New Work)	Dredging Lower Bay	October 1, 1999 to September 30, 2000	6,041,007	$23,713,786[6]
		Dredging Upper Bayou	October 1, 1999 to September 30, 2000	1,518,758	$3,551,584[7]
		Dredging Jetty and Entrance Channel	October 1, 1999 to July 20, 2000	6,345,257	$17,380,523[8]
		Dredging Upper Bay	February 2, 2000 to September 30, 2000	4,532,096	$8,582,768[9]
		Dredging Lower Bayou	April 28, 2000 to September 30, 2000	1,234,585	$3,869,451[10]
12.	Houston Ship Channel (Maintenance)	Dredging Lower Bay (O&M portion)	October 1, 1999 to September 30, 2000	414,173	$1,780,947
		Dredging Upper Bayou (O&M portion)	October 1, 1999 to September 30, 2000	95,238	$200,000
		Dredging Sims to Greens Bayou With Extension to Boggy Bayou	October 1, 1999 to July 27, 2000	723,313	$1,087,794
		Dredging Upper Bay (O&M portion)	February 2, 2000 to September 30, 2000	50,000	$106,000
		Dredging Lower Bayou (O&M portion)	April 28, 2000 to September 30, 2000	96,618	$200,000
		Dredging Houston Ship Channel, Sims Bayou to Main Turning Basin And Light Draft Channel	July 19, 2000 to September 30, 2000	270,250	$1,000,000
	Bayport Ship Channel (Maintenance)	Dredging Upper Bay (O&M Bayport portion)	February 2, 2000 to September 30, 2000	476,629	$713,001

TABLE 40-J DREDGING OPERATIONS

See Section In Text	Project	Description	Period	Cubic Yards of Materials	FY 99 Cost
13.	Matagorda Ship Channel, TX (Maintenance)	Dredging GIWW, Main Channel in Matagorda Bay	October 27, 1999 to April 6, 2000	122,609	$220,796
		Dredging Matagorda Ship Channel to Port Lavaca and Harbor of Refuge	January 10, 2000 to April 6, 2000	1,281,498	$631,330
14.	Sabine-Neches Waterway, TX (Maintenance)	Dredging Port Arthur Canal, Junction Area, and Turning Basin	October 1, 1999 to December 22, 1999	1,644,446	$1,211,376
		Dredging Neches River Lower Reach in Orange and Jefferson Counties	October 1, 1999 to April 28, 2000	1,912,999	$2,129,280[11]
		Dredging Sabine Pass, Outer Bar and Bank Channel	December 15, 1999 to May 2, 2000	4,782,702	$3,913,359
		Emergency Dredging Sabine Neches Waterway, Neches Canal Sec. B And Sabine River Channel	August 25, 2000 to September 30, 2000	98,324	$716,546
		Dredging Sabine Neches Waterway, Sabine Pass Jetty Channel	September 25, 2000 to September 30, 2000	0	$50,000[1]
17.	Trinity River and Tributaries, TX (Maintenance)	Dredging Channel to Anahuac and Channel to Trinity	August 30, 2000 to September 30, 2000	35,100	$1,254,460

[1] Partial cost incurred in FY 00 for mobilization.
[2] Total cubic yards in the amount of $337,100 were reported in FY 00.
[3] In addition $19,323 expended from contributed funds.
[4] In addition $428,680 expended from contributed funds.
[5] In addition $153,200 expended from contributed funds.
[6] In addition $9,085,364 expended from contributed funds.
[7] In addition $1,360,704 expended from contributed funds.
[8] In addition $6,659,751 expended from contributed funds.
[9] In addition $3,288,281 expended from contributed funds.
[10] In addition $1,482,487 expended from contributed funds.
[11] In addition $302,679 expended for levees, spillways and ditches from Jefferson County Navigation District's contributed funds.